

ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	Q STATION LIMITS
JERICO ROAD	CUL - DE - SAC	30 M.P.H.	R - 20	Q STA. 0+00 TO Q STA. 16.61.73



TYPICAL ROADWAY SECTION-JERICHO ROAD

(NO SCALE)



(NO SCALE)



(NO SCALE)



(NO SCALE)

LOCATION PLAN

SCALE: 1" = 1200'

BENCH MARKS

USC & GS NO. L-87

N 570,270.3110

E 1,338,980.2270

TRAVERSE PT. •203

N 570,248.2860

E 1,339,139.0420

BRASS DISC SET 25' SOUTH OF
CLARKSVILLE PIKE (MD. RTE. 108)
NEAR CENTER OF PROPERTY.

REBAR AND CAP SET 270' SOUTH OF
CLARKSVILLE PIKE (MD. RTE. 108) NEAR
THE EASTERN BOUNDARY.

ELEV. = 411.51

ELEV. = 426.38

OWNER/DEVELOPER

JERICHO, INCORP.
 5026 DORSEY HALL DRIVE
 SUITE 204
 ELLICOTT CITY, MD. 21042

* SEE SHEET 12 FOR LOCATION IN RELATION TO THE STREET TREES.

1. Unless otherwise noted, all construction is to be in accordance with the following:
 - a. Howard County standard specifications and details for construction
 - b. Maryland State Highway Administration standard specifications for construction and materials, as amended
 - c. Soil Conservation Service 1983 standards and specifications for soil erosion and sediment control
 - d. Soil Conservation Service 1993 standards and specifications for pond construction (code 376).
2. The contractor shall notify the Department of Public Works Bureau of Construction Inspection at 410-313-1870 at least (5) working days prior to the start of construction.
3. The contractor shall notify the Department of Public Works Bureau of Construction Inspection at 1-800-257-7777 at least 48 hours prior to any excavation.
4. Site Data:
 - Location: Clarksville Pike, MD rte. 108,
 - 7700 feet west of Greenwood Rd
 - Map: D-29 Parcel No: 5
 - Zoning: R-20 Ejection District No: 5
 - Total tract area: 2.65 acres
 - Total No. of Single Family Lots: 41
5. Traffic Control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) for all street and regulatory signs shall be in place prior to the placement of asphalt.
6. Topographic survey by Fisher, Collins, and Carter Inc., March 1995 foot contour interval.
7. Horizontal Control is based on the following Howard County control points:
 - 29FA - Denotes conc. monument N 57107.3667 E 1343241.8670
 - 29IA - Denotes conc. monument N 568986.0509 E 1343640.1310
8. Water and sewer systems are public and they are located in the Patapsco drainage area.
9. Storm Water management is provided via a detention pond and extended detention for water quality.
10. Wetlands and Forest Stand Delineations by Eco-Science Professionals, Inc. March 1994, revised February 1995.
11. A.P.F.O. Traffic Study by L. Cunningham and Assoc., Inc. March 1994, revised August 1994.
12. Noise study by The Wilson T. Ballard Co. Sept., 1993
13. Geotechnical report prepared by Herbert & Asch, March 1994.
14. Existing utilities were located by actual field measurement, where possible, supplemented by information obtained from the various agencies involved. We cannot guarantee the accuracy or the completeness of the information received. The contractor must verify all such information to their own satisfaction prior to the start of construction.
15. Any material or earthwork quantities shown herein are provided for the approving authorities use only. The contractor is responsible for verifying quantities to their own satisfaction prior to bidding the work.
16. Section 16.16(a)(6) of the Subdivision and Land Development Regulations prohibits any earthwork activity within the required wetland or stream bank buffers.
17. This project is subject to a design manual waiver from the Design Manual Volume III:
 - 1. Section 1.5.1 to allow a cul-de-sac (Jericho Rd) to exceed to 1200' L.F. minimum.
 - 2. Table 2.01 to allow a 40 foot horizontal radius (in the loop retrofit) in lieu of the 316 foot minimum horizontal radius).

Approved July 25, 1994 subject to parking being prohibited in the proposed cul-de-sac.

This project is subject to waiver petition PW-95-79 from the Howard County Subdivision and Land Development Regulations: Section 16.16(a)(2) to permit grading and removal of vegetative cover within the 100 foot buffer for the purpose of constructing a storm water management facility and placing a 4 inch PVC outfall pipe from the proposed slow marsh and pond area to the stream. Also the removal of trees within the detention priority area.

Approved April 27, 1995 conditioned upon the following:

1. A grading permit will not be issued until copies of all required permits from the Maryland Department of the Environment and/or the U.S. Army Corps of Engineers for the proposed grading activity and the environmental buffers are submitted to the county.
2. Eliminate the proposed grading (along the southern end of the proposed storm water management pond within the wetlands buffer).

Based on a review of the geotechnical reports prepared by Herbert & Asch dated March 12, 1994 and February 23, 1995 the following observations were noted:

1. Storm water disposal by infiltration practice will not be feasible due to the proposed storm water management pond area due to elevated water levels and the presence of native subsoils with insufficient permeability.
2. From review of the borings logs in conjunction with the laboratory data, we consider that materials conforming to Unified classification CL or SC will not be available in sufficient quantities in the pond basin area for the proposed storm water management pond cut off trench and potential embankment core construction if so designated. Thus, an approved off-site borrow source or on-site borrow source conforming to Unified classification CL or SC may be required to complete the storm water management pond construction.

20. For additional information see Preliminary Equivalent Sketch Plan Number SP-94-94-07.

21. See the following Water and Sewer contract numbers: Ex. 16'W in ID. Rte. 108, 44-3248
Ex. 6' San. in Hobbsville Subdivision 34-1662-D
Prop. Water & Sewer in the Jericho Subdivision 34-3372-D

2-BUILT 11/11/88

APPROVED: DEPARTMENT OF PUBLIC WORKS

Arthur M. Daniels
Chief, Bureau of Highways

1-23-96
Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Quina Hummange
Chief, Division of Land Development
and Research

1/30/96
Date

Chad C. Summers
Chief, Development Engineering Division

Date 1/26/95

FINAL CONSTRUCTION PLAN
COVER SHEET
JERICHO PROPERTY

TAX MAP No. 29 PARCEL 55

FIFTH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

DATE: JUNE, 1995 SCALE AS SHOWN

SHEET 1 OF 16

AS-BUILT 11/11/98

F-96-06

1780

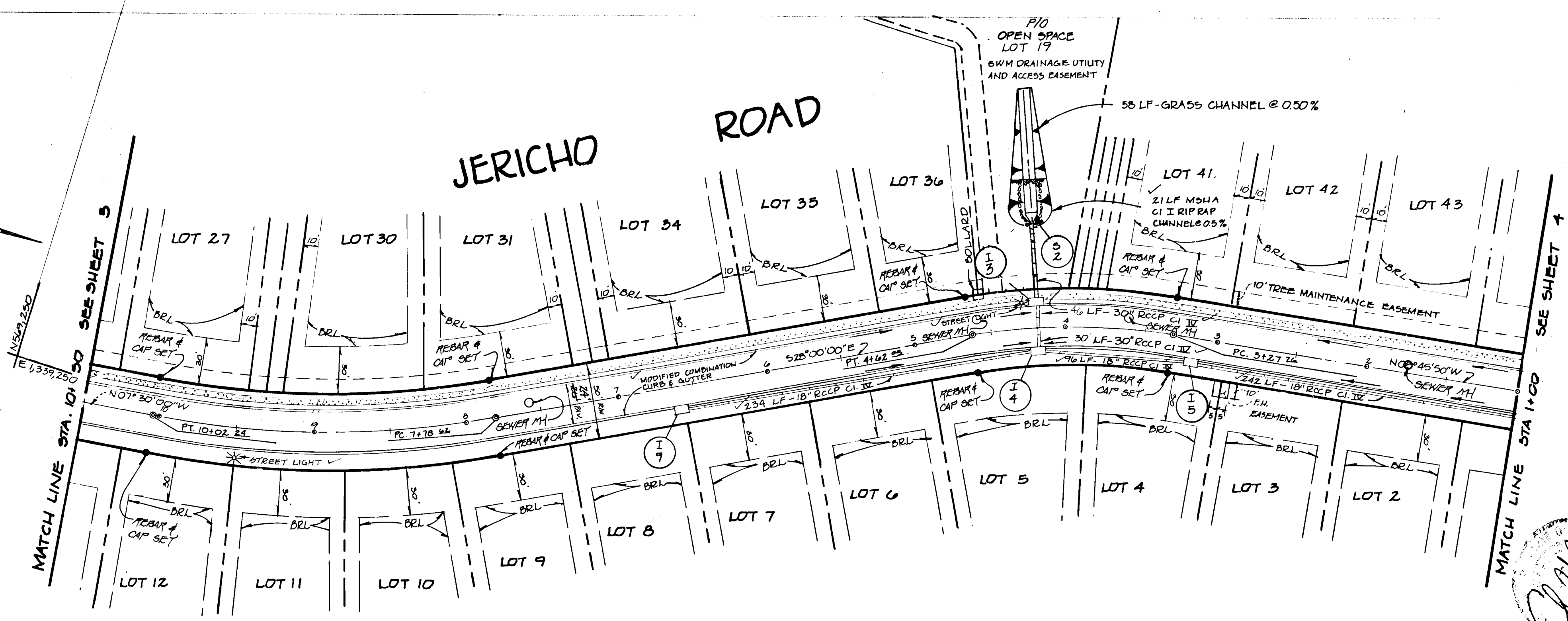
PLAN
NO. 1
DATE 1/23/96
BY [Signature]
CHECKED [Signature]
DATE 1/30/96
BY [Signature]
CHECKED [Signature]
DATE 1/26/96
BY [Signature]

PROFILE
NO. 1
DATE 1/23/96
BY [Signature]
CHECKED [Signature]
DATE 1/30/96
BY [Signature]
CHECKED [Signature]
DATE 1/26/96
BY [Signature]

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways
1-23-96
Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development and Research
1/30/96
Date

Chief, Development Engineering Division
1/26/96
Date



1. CURVE DATA

STA. 7+78.62 TO STA. 10+02.24
R = 625.00'
L = 223.62'
Δ = 20°29'59"
T = 113.02'

2. CURVE DATA

STA. 3+27.74 TO STA. 4+42.50
R = 400.00'
L = 124.29'
Δ = 19°14'10"
T = 67.79'

PLAN
SCALE: 1" = 50'

STATION	DISTANCE FROM FLOW LINE TO EDGE OF WALK
1+00	6.0'
1+50	5.5'
2+00	5.5'
2+50	5.4'
3+00	5.0'
3+28	4.0'
3+50	4.0'

NOTE: SEE SHEET 3 FOR STRUCTURE SCHEDULE

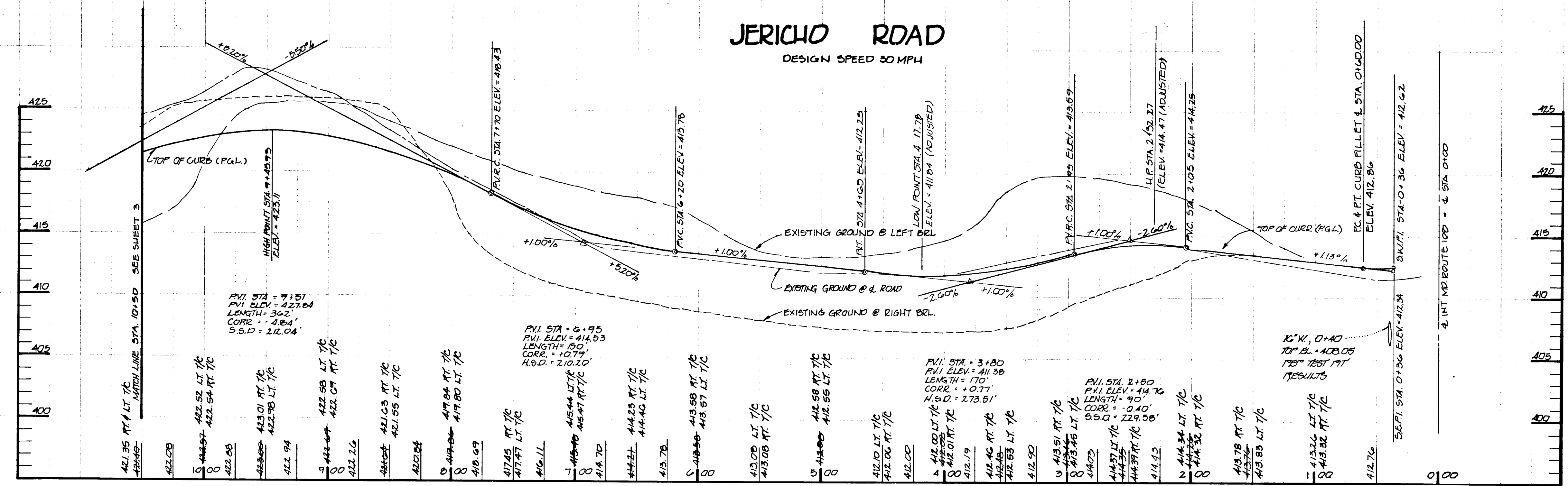
JERICHO
TAX MAP 29 PARCEL 55
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

JERICHO ROAD
STA. 0+36 TO STA. 10+50

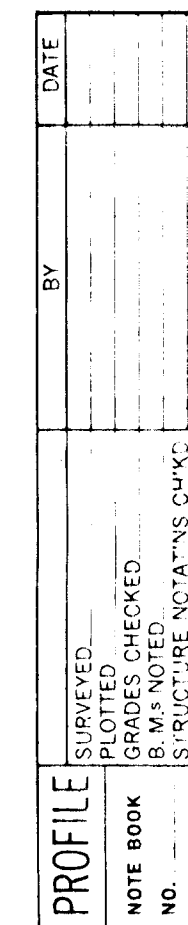
OWNER AND DEVELOPER
JERICHO, INC.
5024 DORSEY HALL DRIVE
SUITE 204
ELLCOTT CITY, MD. 21042

SEAL AS SHOWN DATE JUNE 1995 PROJECT NO. 2 9116
DIS. A.W.R. DAN R. POOLE CHIEF C.J.C.

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK 10272 BALTO. NATION PKE
ELLCOTT CITY, MARYLAND 21042 (410) 461-2895

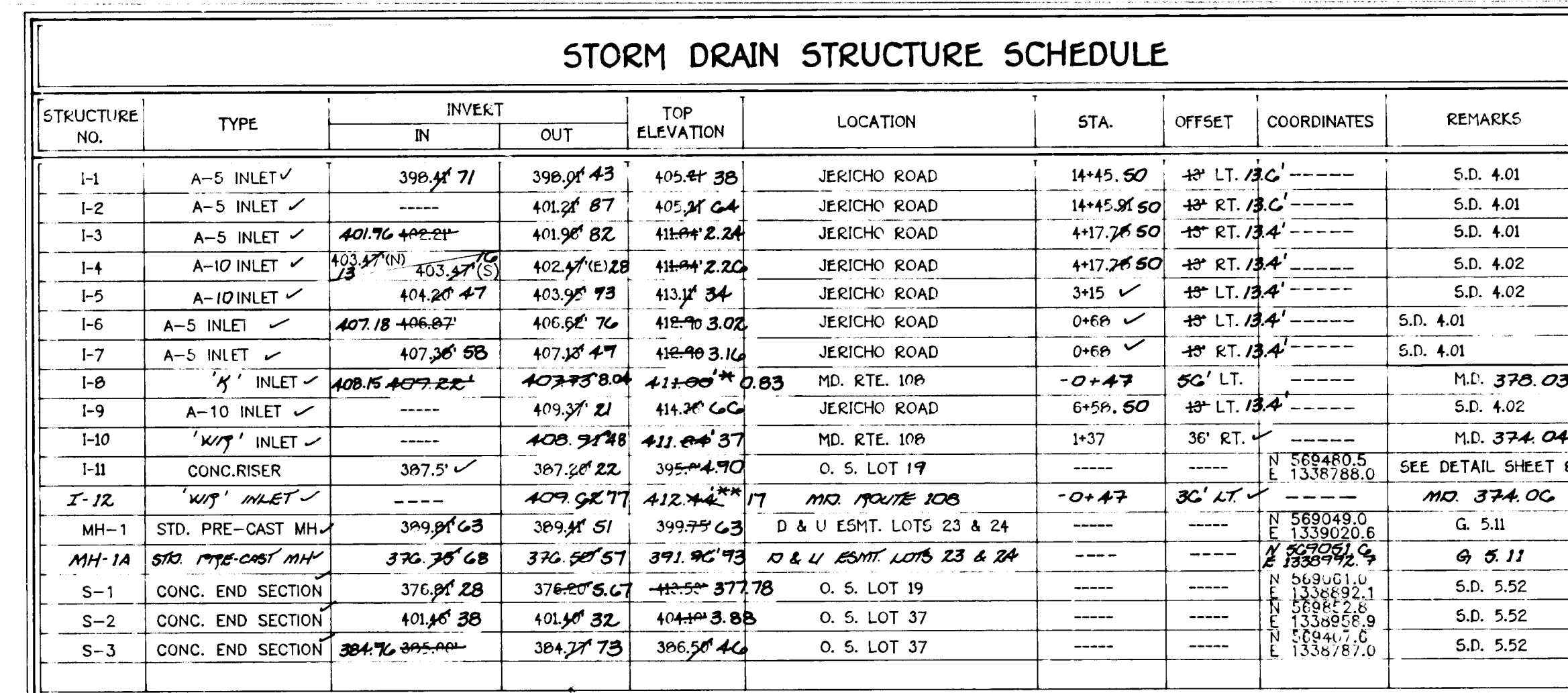


PROFILE
1" = 50' HORIZ.
1" = 5' VERT.

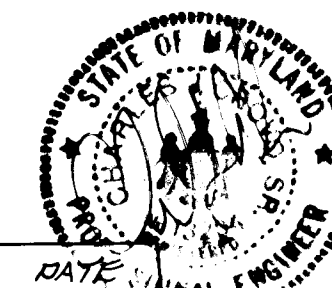
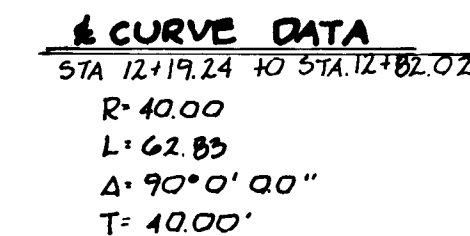


NOTE:
THE SHALLOW MARSH SHALL BE CONSTRUCTED
AND PLANTED IN ACCORDANCE WITH THE GUIDELINES
FOR CONSTRUCTING WETLAND STORMWATER BASINS;
BY THE WATER MANAGEMENT ADMINISTRATION,
MARYLAND DEPARTMENT OF THE ENVIRONMENT,
2500 BROEHRING HIGHWAY, BALTIMORE, MARYLAND,
21224

W. J. O'Connor
Chief, Development Engineering Division

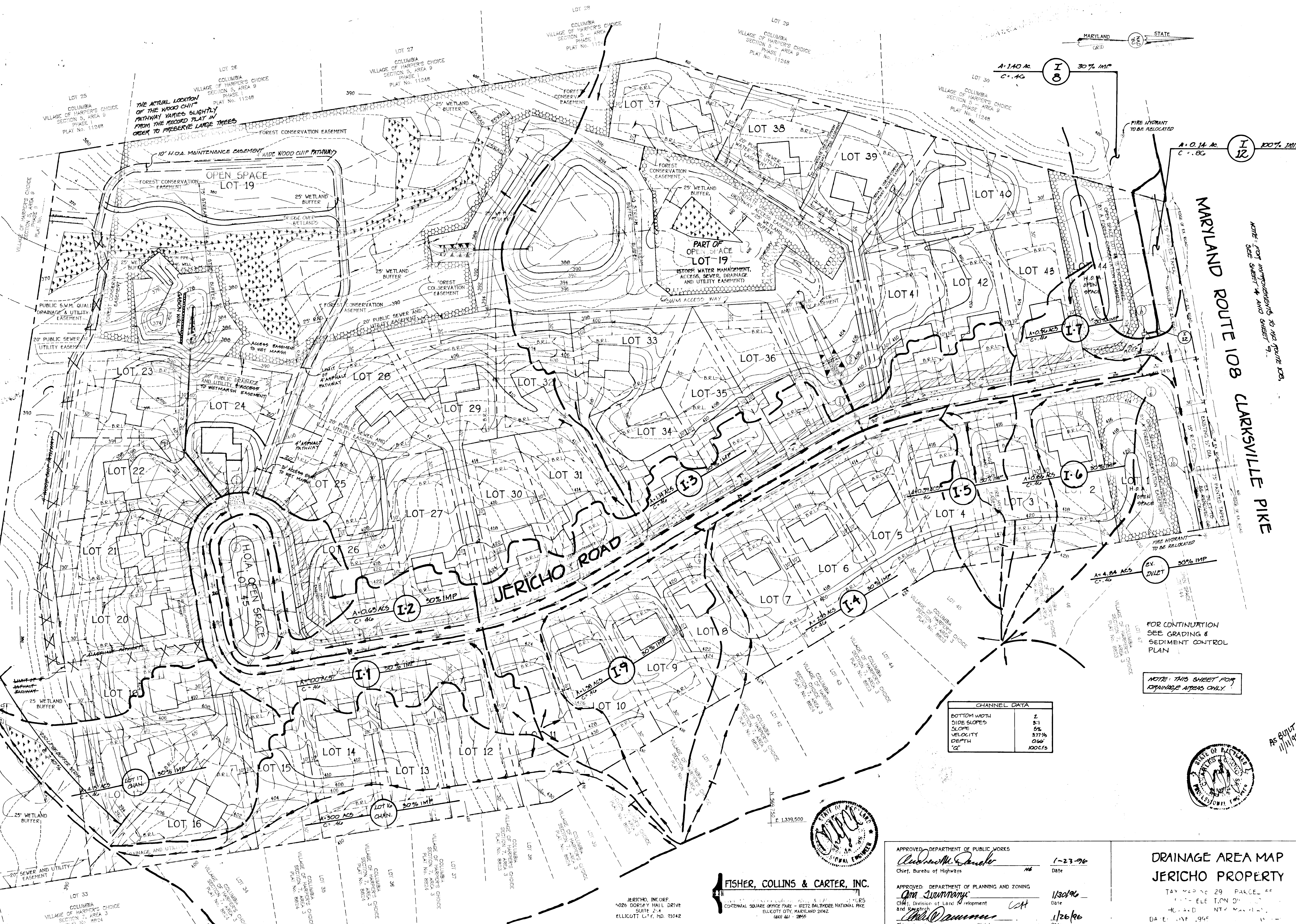


* DENOTES THROAT ELEVATION
** DENOTES TOP OF GRATE



FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK-10272 BALTO. NAT. PIKE
ELLICOTT CITY, MARYLAND 21042 (410) 461-2855

1780



NOTE: FOR IMPROVEMENTS TO MD ROUTE 108, SEE SHEET 4 AND SHEET 9.

MARYLAND ROUTE 108 CLARKSVILLE PIKE

CHANNEL DATA	
BOTTOM WIDTH	2
SIDE SLOPES	5:1
SLOPE	5%
VELOCITY	3.774
DEPTH	0.146
"Q"	100 CFS

FOR CONTINUATION SEE GRADING & SEDIMENT CONTROL PLAN

NOTE: THIS SHEET FOR DRAINAGE AREAS ONLY.



FISHER, COLLINS & CARTER, INC.

JERICO, INCORP.
4026 DORSEY HALL DRIVE
ELLICOTT CITY, MD. 21042

APPROVED - DEPARTMENT OF PUBLIC WORKS
Andrew M. Dando 1-23-96
Chief, Bureau of Highways
Date

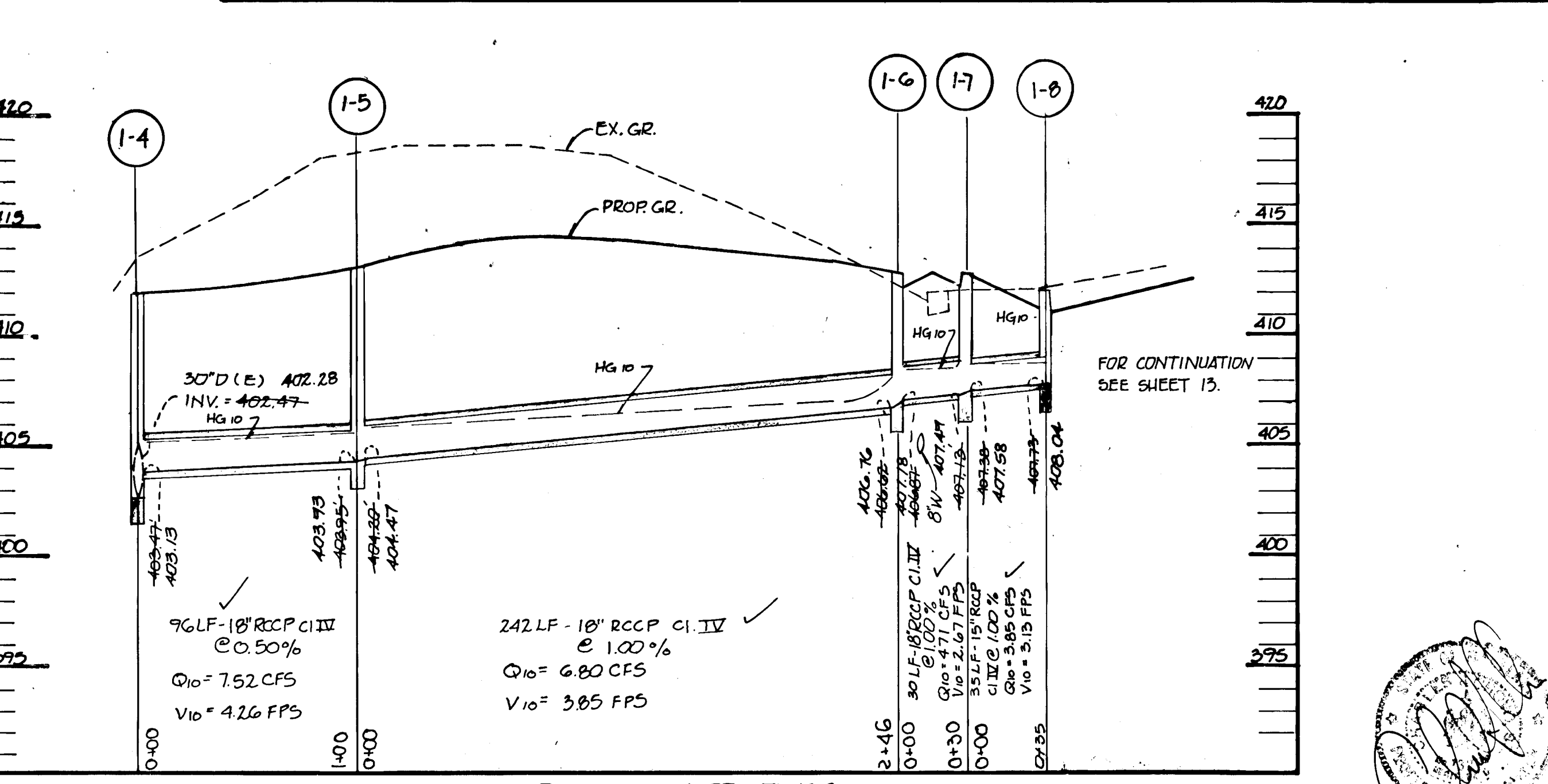
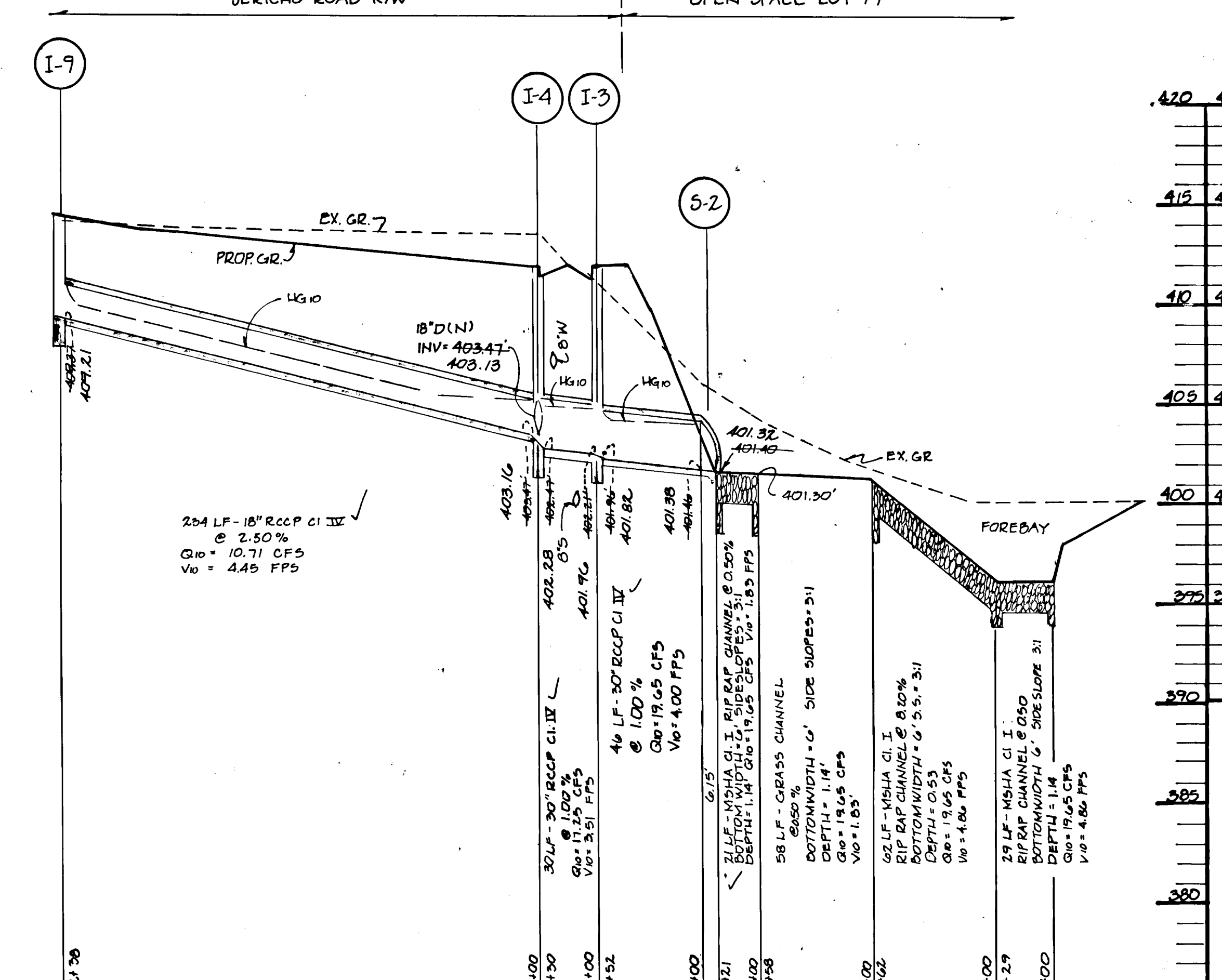
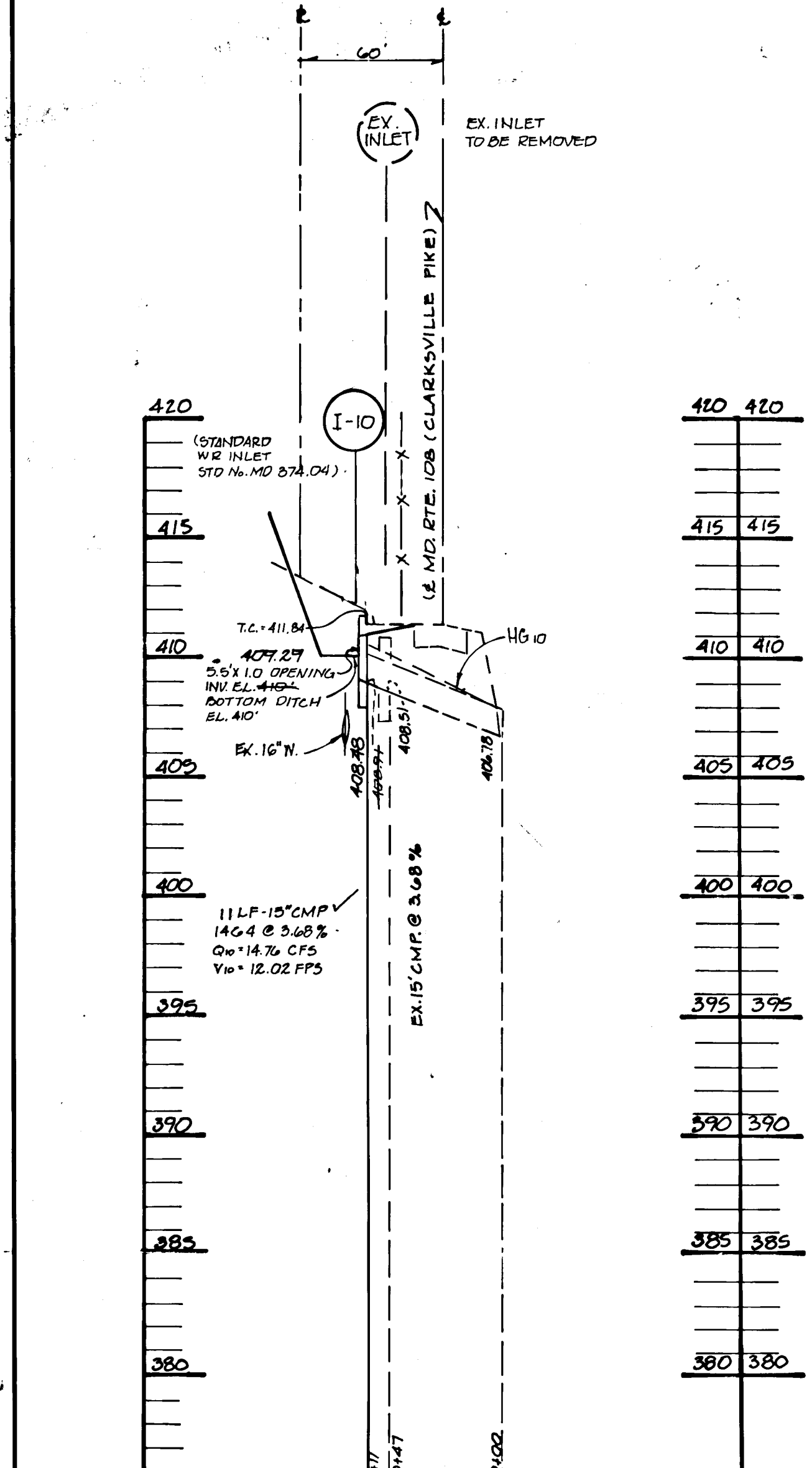
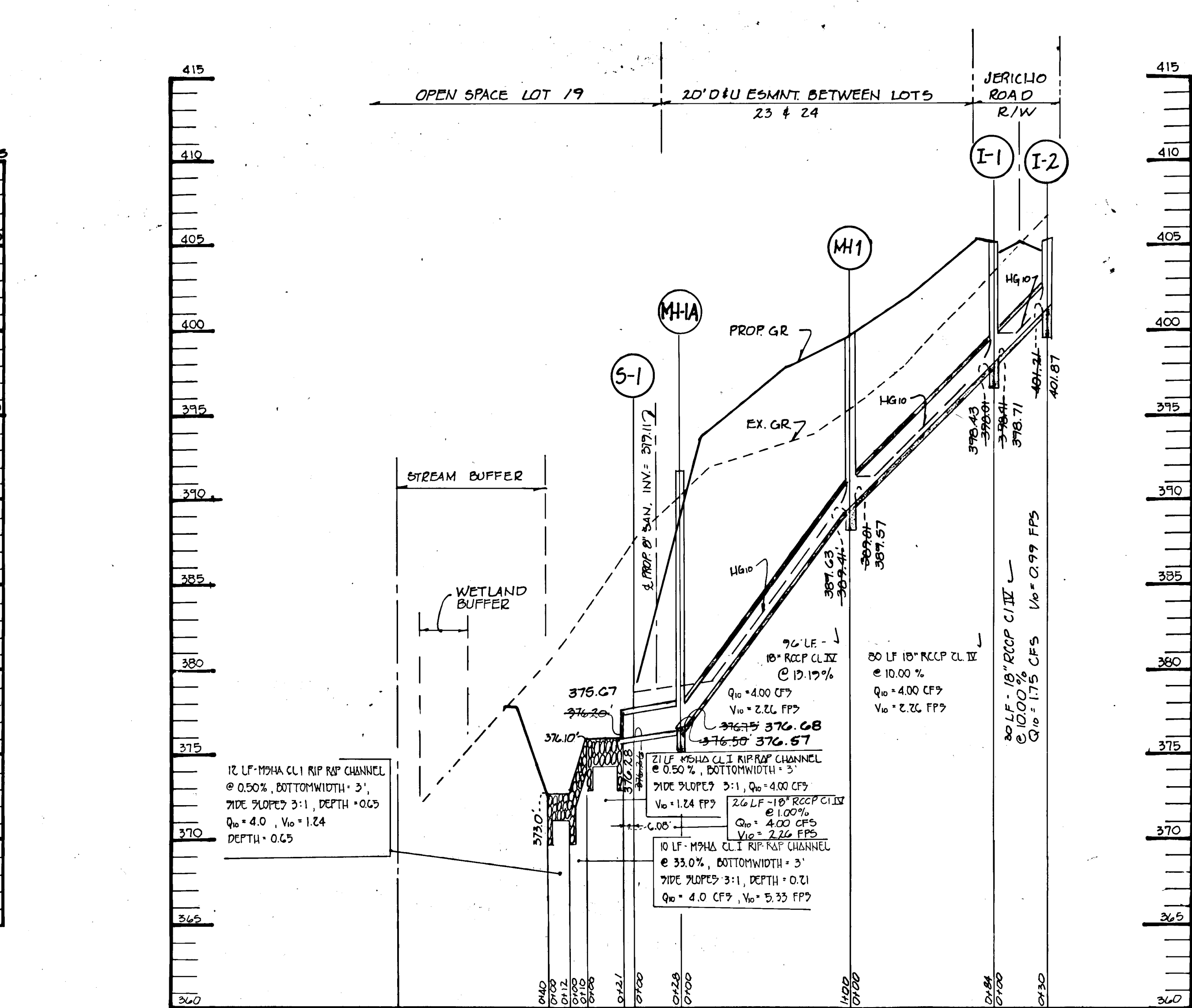
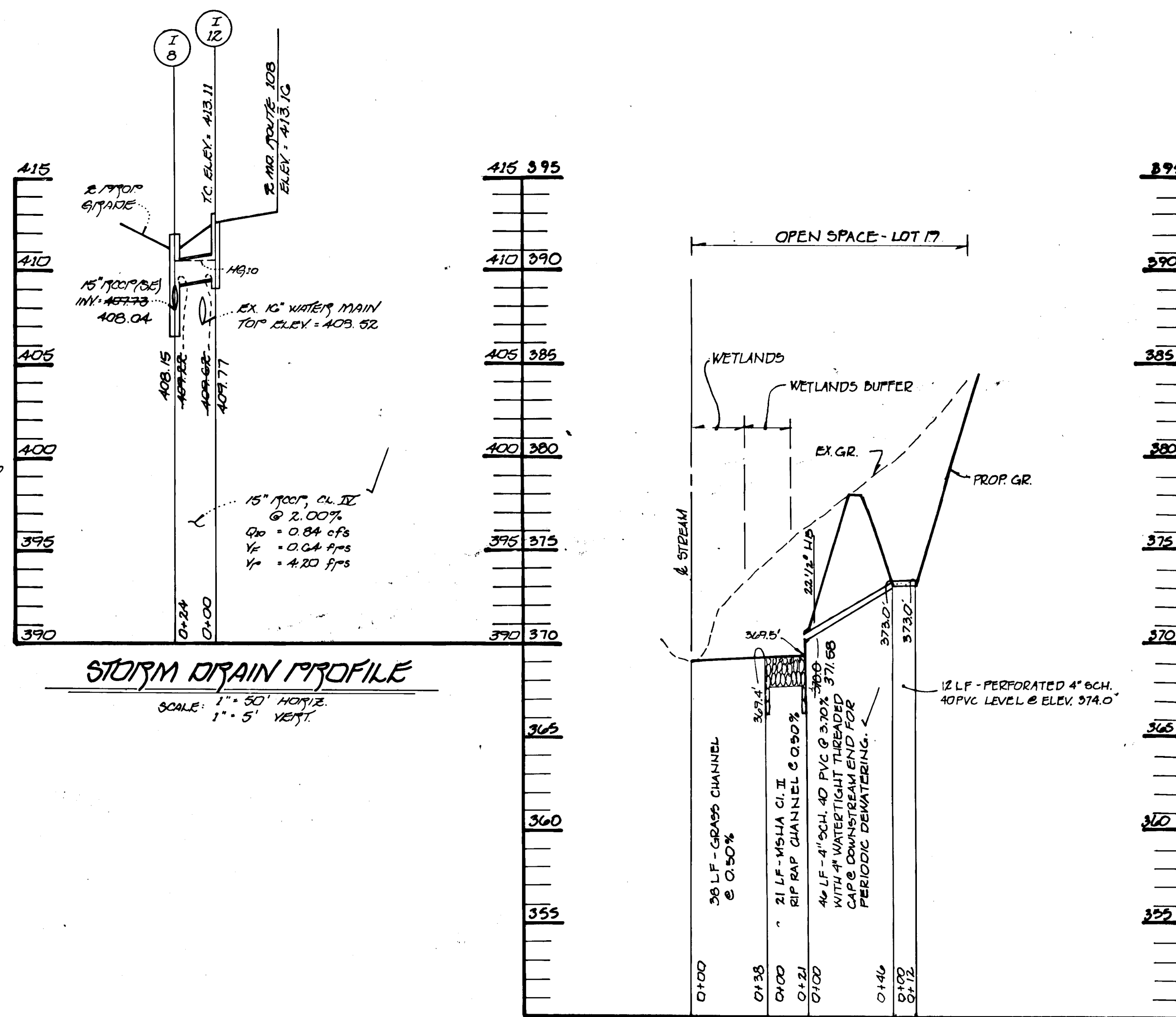
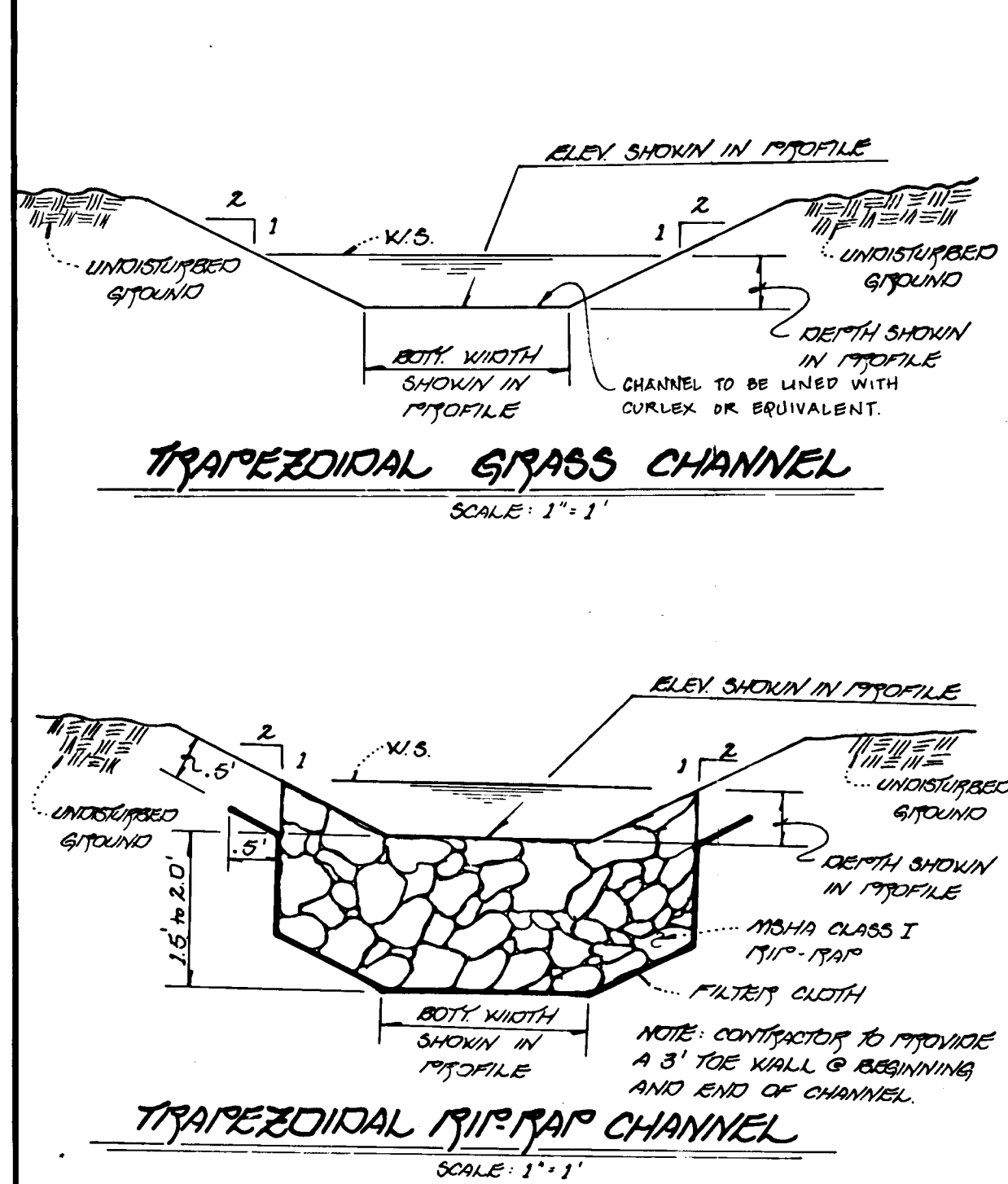
APPROVED - DEPARTMENT OF PLANNING AND ZONING
Ann Summery 1/30/96
Chief, Division of Land Development
Date

Chris Dammann 1/26/96
Chief, Development & Planning Division
Date

DRAINAGE AREA MAP
JERICO PROPERTY

TAX MAP NO. 29 PARCEL 55
ELEVATION 10' 0" 10' 0"
H.C. 24.0 N.T.V. MAX 11.1
DATE: 11/11/96

AS-BUILT 11/11/98



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK 10112 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
410 461-2850

STORM DRAIN PROFILE
SCALE: 1"=5' VERT.
1"=50' HORIZ.

STORM DRAIN PROFILES
SCALE: 1"=5' VERT.
1"=50' HORIZ.

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels
Chief, Bureau of Highways 1-23-96 Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Glenn Surman
Chief, Division of Land Development and Research 1/30/96 Date

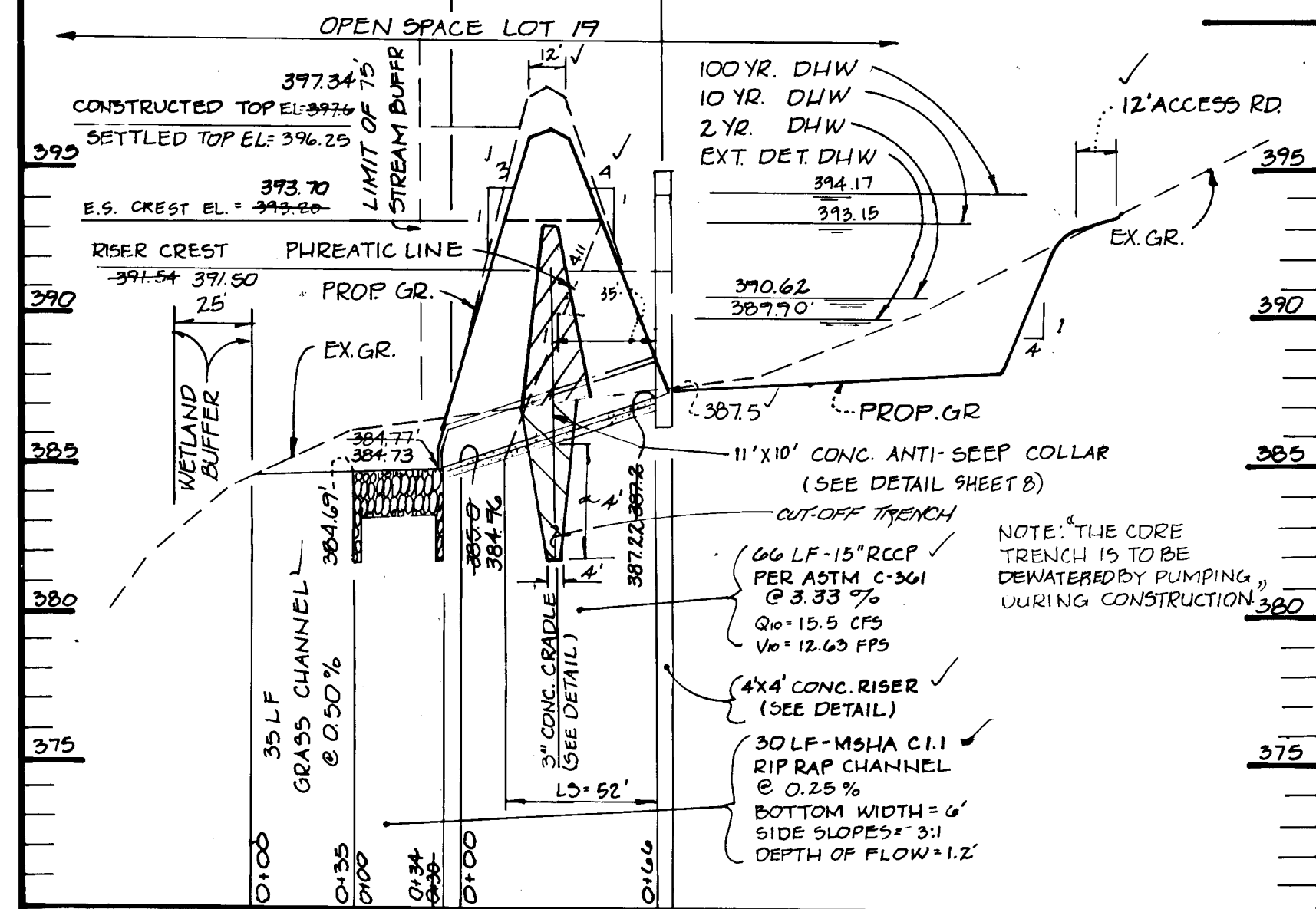
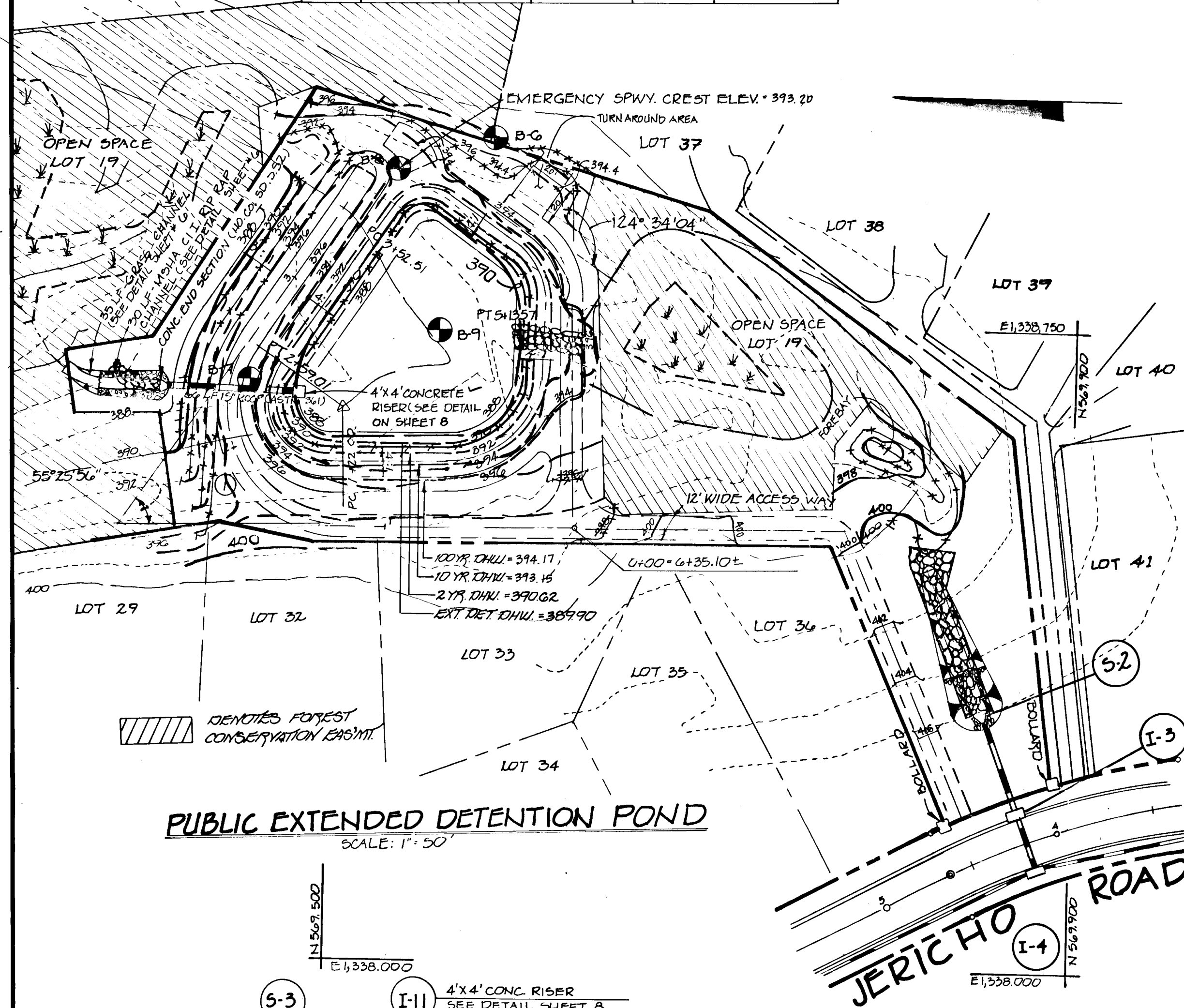
OWNER/DEVELOPER
JERICHO, INCORP.
5026 DORSEY HALL DRIVE
SUITE 204
ELLICOTT CITY, MD 21042

STORM DRAIN PROFILES
JERICHO PROPERTY
TAX MAP No. 29 PARCEL 55
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DATE: JUNE, 1995 SCALE AS SHOWN
SHEET 6 OF 16

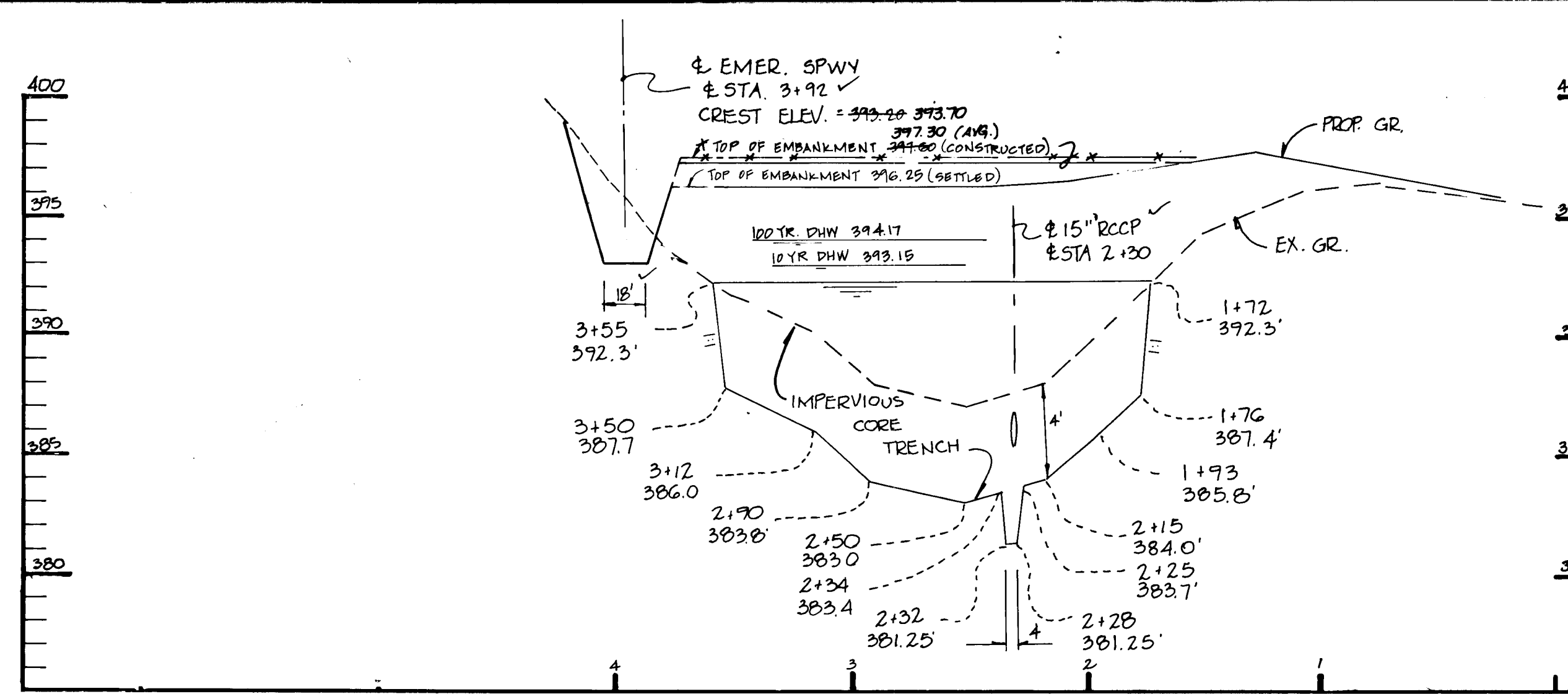
0221

AS-BUILT
11/11/98

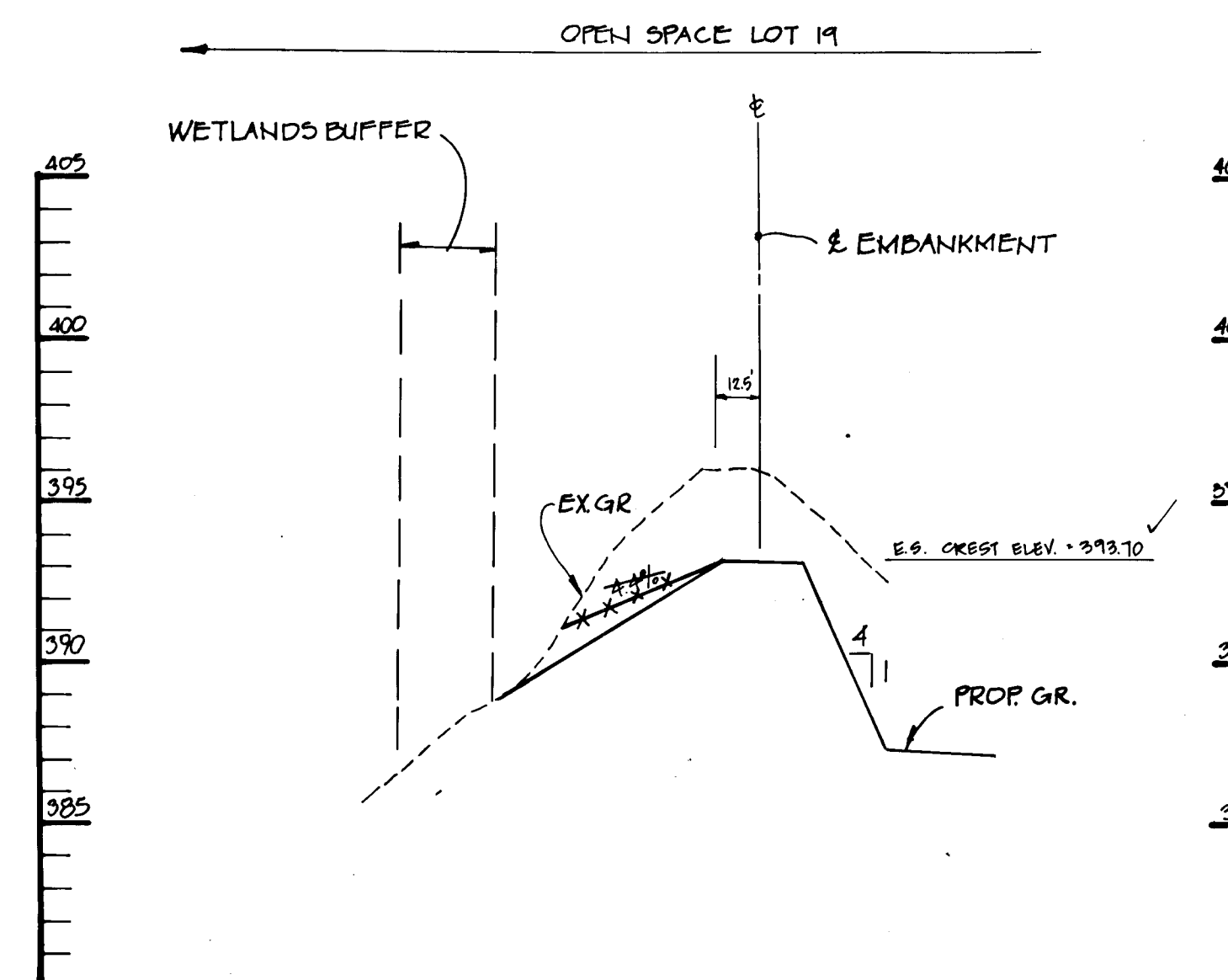
ACCESS ROAD CURVE DATA					
NO.	DELTA	RADIUS	TANGENT	LENGTH	CHORD
1	124°36'04"	63'	120'	137.01	111.56'



PROFILE ALONG & OF PRINCIPAL SPILLWAY
SCALE: 1"=50' HORIZ.
1"=5' VERT.



PROFILE ALONG & OF EMBANKMENT
SCALE: 1"=50' HORIZ.
1"=5' VERT.



PROFILE ALONG EMERGENCY SPILLWAY
SCALE: 1"=50' HORIZ.
1"=5' VERT.

LEVEL OF MANAGEMENT PROVIDED	
WATER QUALITY:	SHEET FLOW ACROSS OPEN SPACE LOT NO. 19 ALONG WITH A SHALLOW MARSH ARE PLANNED FOR PROPOSED SUB AREA 1.
	SHEET FLOW ACROSS THE EXISTING RACE RIGHT-OF-WAY IS PLANNED FOR PROPOSED SUB AREAS 2.
	NONE IS PLANNED FOR PROPOSED SUB AREA 3.
	EXTENDED DETENTION OF THE ONE (1) YEAR FREQUENCY STORM FOR 24 HOURS IS PLANNED FOR PROPOSED SUB AREA 4.
WATER QUANTITY:	FOR CONTROLLING RUN-OFF TO LEVELS EXISTING PRIOR TO DEVELOPMENT FOR THE 2 AND 10 YEAR STORMS FROM THE ENTIRE SITE (BY-PASSING PROPOSED SUB AREAS 1, 2 & 3) AND OVER MANAGING FOR THESE BY-PASS AREAS IN PROPOSED SUB AREA 4).
TYPE OF FACILITY:	HAZARD CLASS 'A' - EXTENDED DETENTION POND.
DRAINAGE AREA TO FACILITY:	18.23 ACRES OR 0.02840 SQ.MILES.
DESIGN FREQUENCY:	2 YEAR 10 YEAR 100 YEAR
INFLOW RATE:	18.1 CFS 42.7 CFS 88.5 CFS
OUTFLOW RATE:	0.7 CFS 12.4 CFS N/A
ALLOWED ACTUAL OUTFLOW RATE:	0.58 CFS 15.46 CFS 56.79 CFS
STORAGE VOLUME (AC. FT.):	0.731 AC.FT. 1.180 AC.FT. N/A
WATER SURFACE ELEVATION:	390.62 392.29 393.49
PEAK TIME (HRS.):	17.90 12.34 12.19

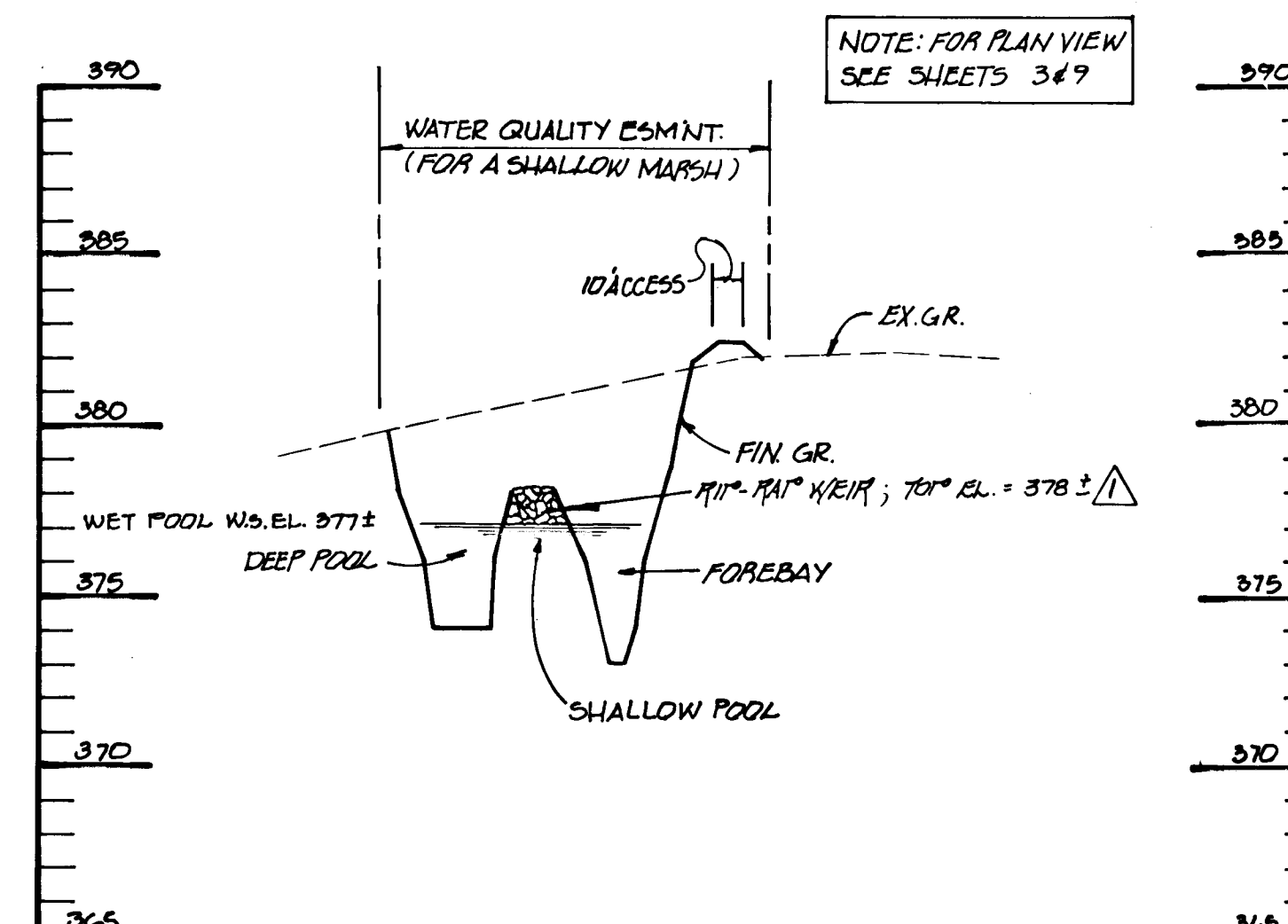
APPROVED DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways
APPROVED DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development and Research
Chief, Department of Engineering Division
These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
Howard Soil Conservation District
These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
USDA-NRCS, Natural Resources Conservation Service

ENGINEER'S CERTIFICATE
I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

DEVELOPER'S CERTIFICATE
I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

AS-BUILT CERTIFICATION
I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plan and meets the approved plans and specifications.

OPERATION AND MAINTENANCE SCHEDULE
OF HOME OWNERS ASSOCIATION OWNED AND MAINTAINED
STORMWATER MANAGEMENT FACILITY
EXTENDED DETENTION POND
HOME OWNERS ASSOCIATION'S MAINTENANCE RESPONSIBILITIES:
1. Top and side slopes of the embankment shall be mowed a minimum of two (2) times a year, once in June and once in September.
2. Other side slopes, the bottom of the pond, and maintenance access should be mowed as needed.
3. Debris and litter next to the outlet structure shall be removed during regular mowing operations and as needed.
4. When deemed necessary for aesthetic reasons, sediment should be removed from the pond. Approval of the Department of Public Works is required.



SHALLOW MARSH-SECTION 'A-A'
SCALE: 1"=50' HORIZ.
1"=5' VERT.

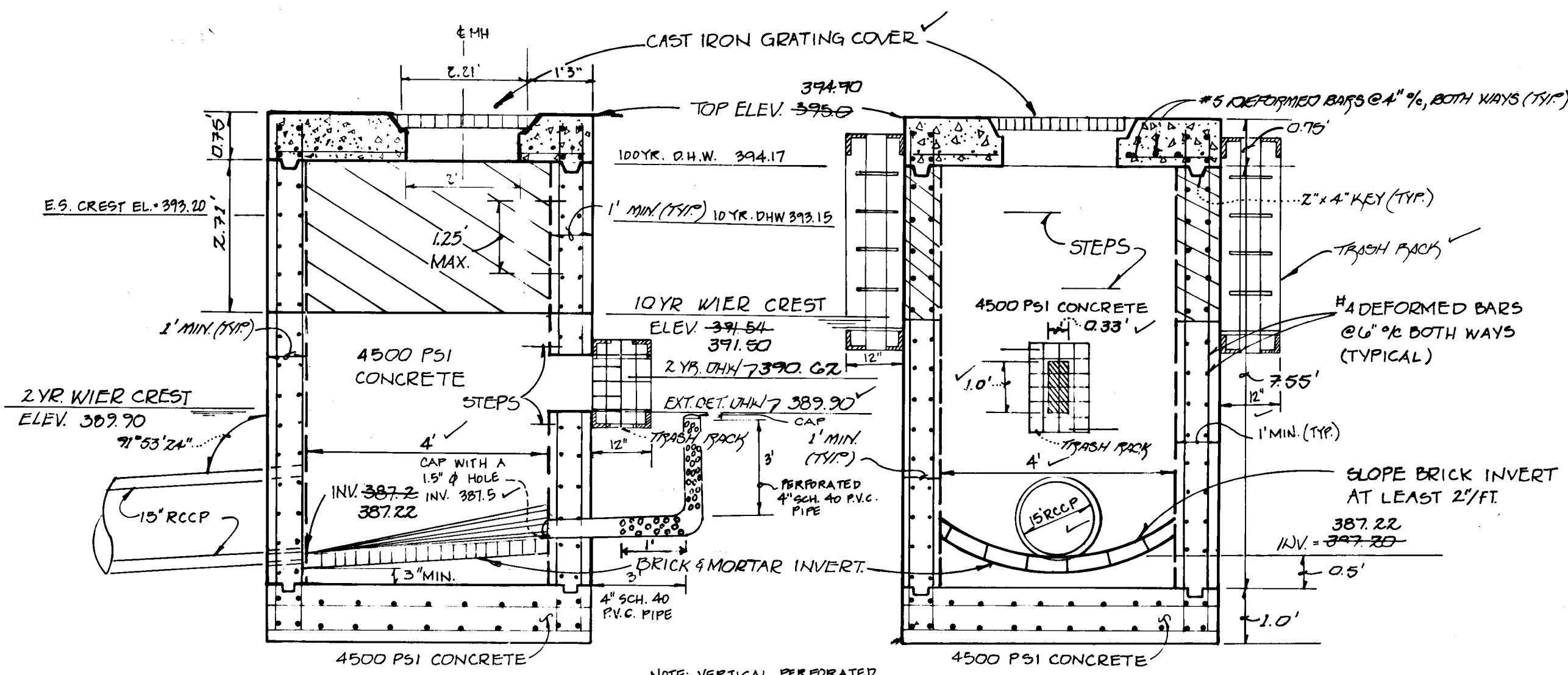
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
12722 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-2855

NO.	REVISION	DATE
1	ADDED 10'x10' RAMP TO SHALLOW MARSH, DELETED GABION WALL	6-15-99



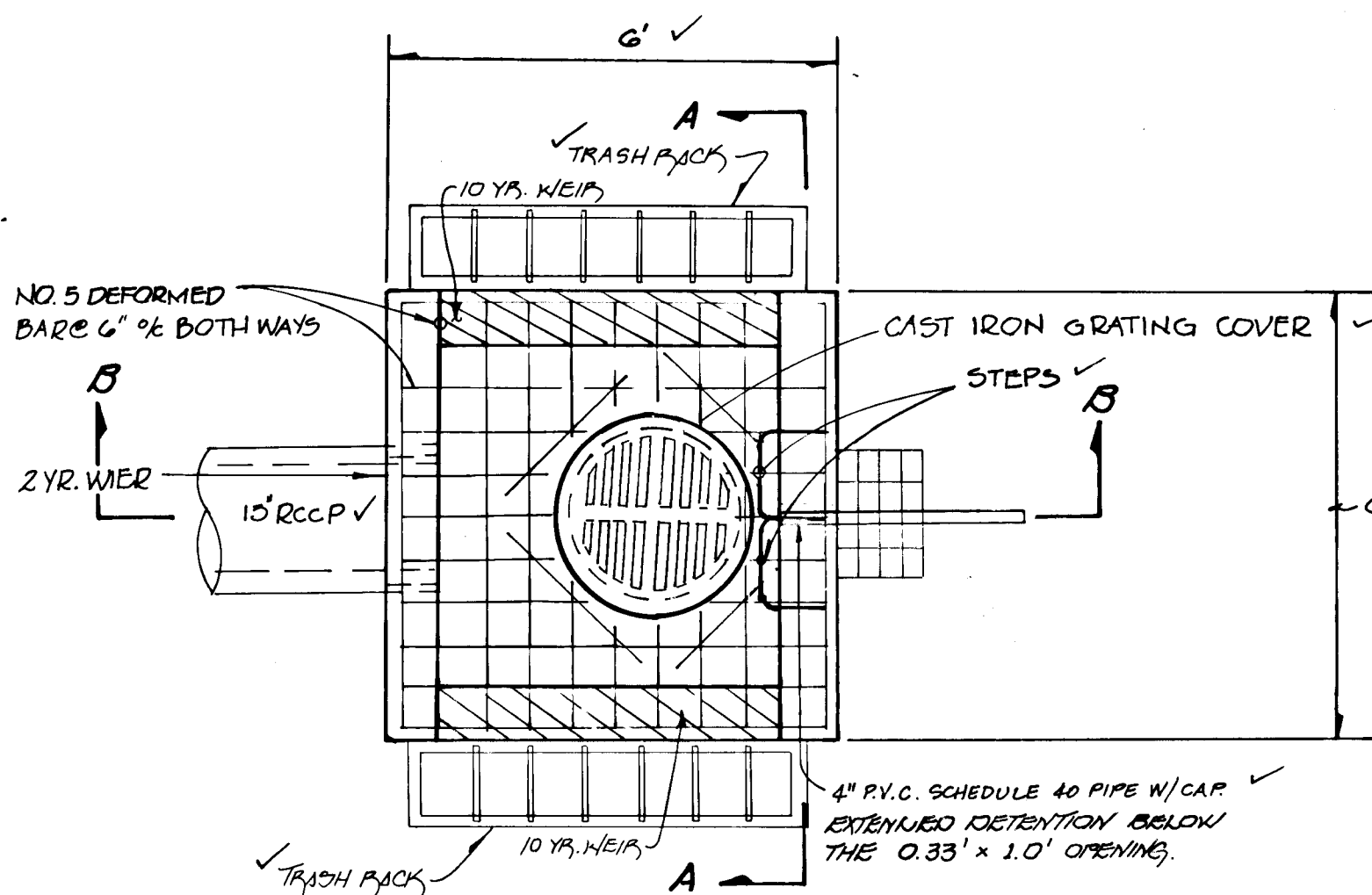
OWNER/DEVELOPER
JERICO, INCORP.
5026 DORSEY HALL DRIVE
SUITE 204
ELLICOTT CITY, MD 21042

S.W.M. PLAN AND PROFILES
JERICO PROPERTY
TAX MAP No. 29 PARCEL 55
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DATE: JUNE, 1995 SCALE AS SHOWN
SHEET 7 OF 16



RISE ELEVATION 'B-B'

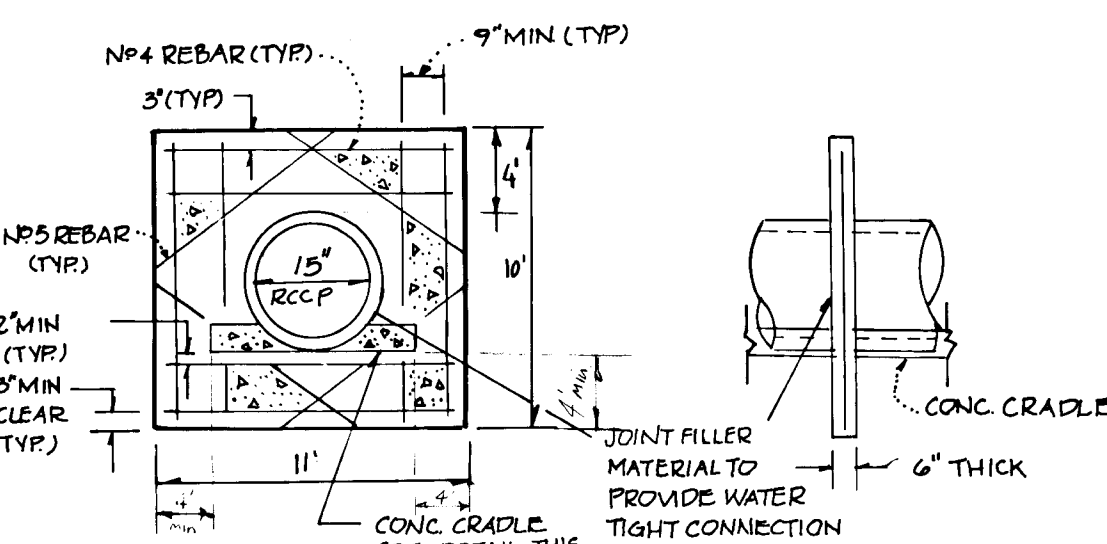
RISE ELEVATION 'A-A'



RISE TOP VIEW

RISE DETAIL

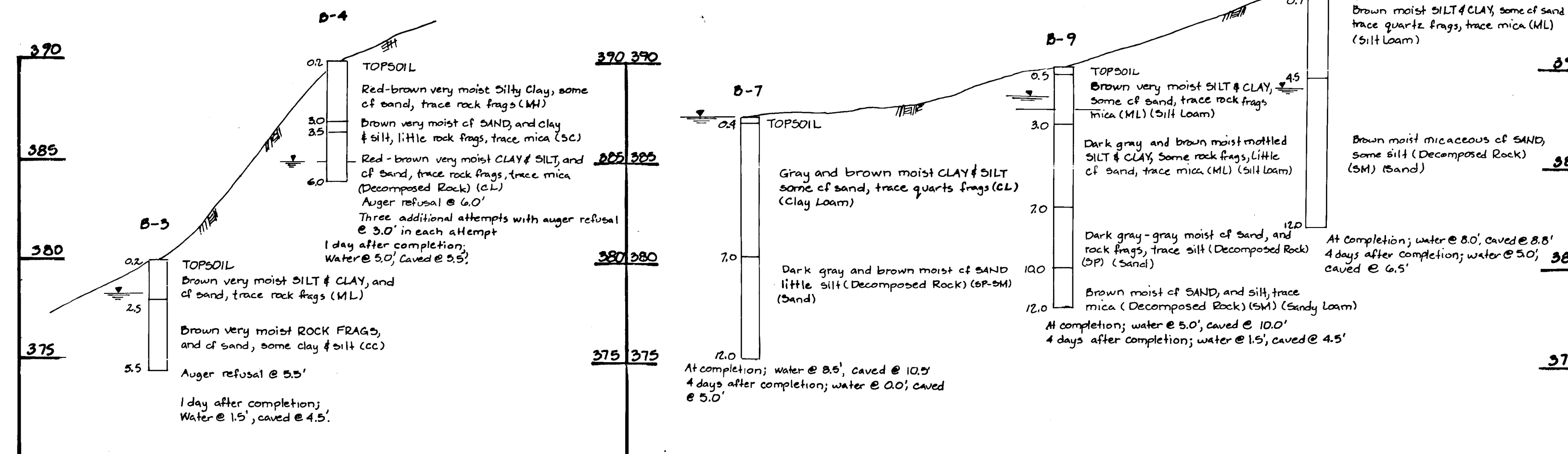
SCALE 1" = 2'



- NOTES:
1. ANTI-SEEP COLLAR SHALL BE LOCATED 2' MIN FROM ANY PIPE JOINT.
 2. USE ONE 10' x 11' CONCRETE ANTI-SEEP COLLAR.

ANTI-SEEP COLLAR DETAIL

(NO SCALE)

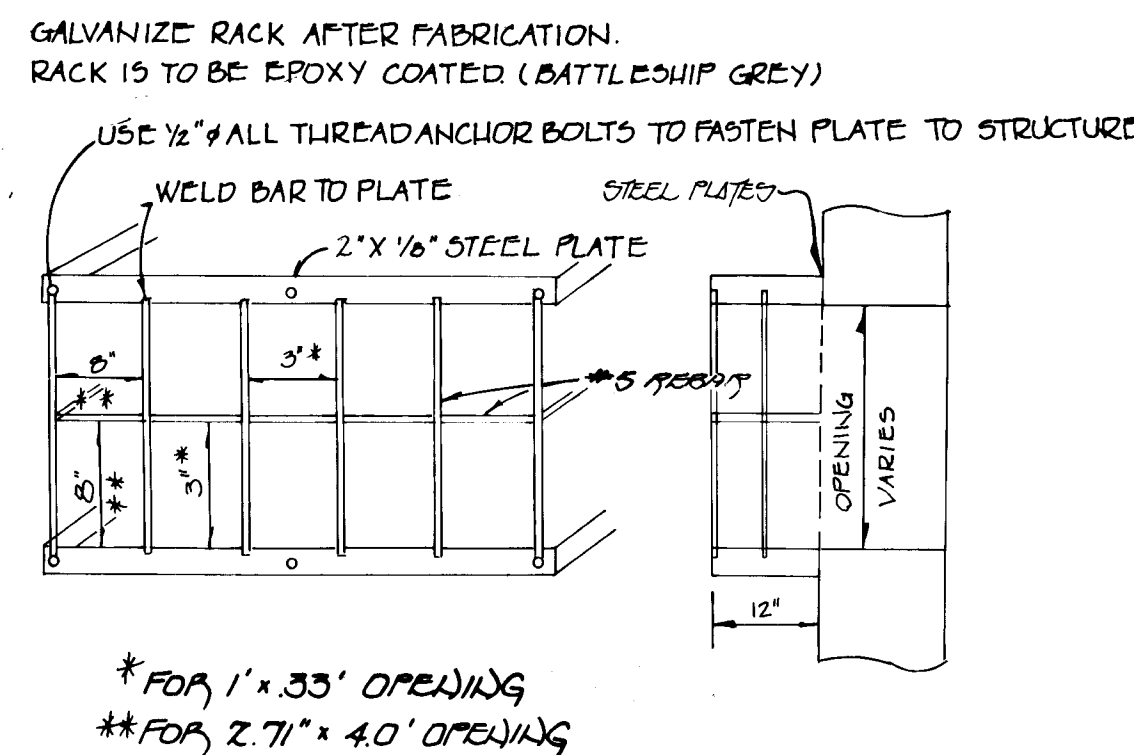


SHALLOW MARSH BORING LOGS

NO SCALE

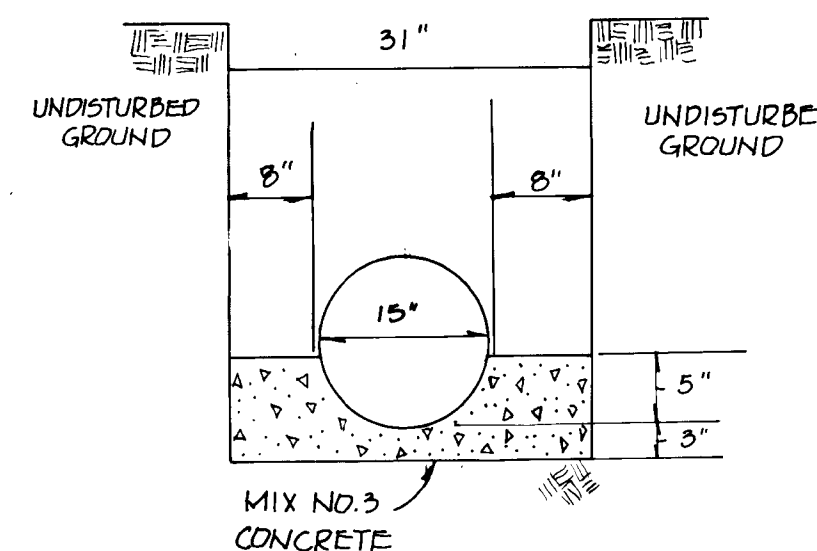
POND BORING LOGS

NO SCALE



TRASH RACK DETAILS

NOT TO SCALE



CONCRETE CRADLE DETAIL

(NO SCALE)

POND SPECIFICATION

- I. SITE PREPARATION
Areas under the embankment and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. To facilitate clean out and restoration, it is recommended that the permanent pool area be cleared of all brush and trees.
- II. EARTH FILL
The fill material shall be taken from approved designated borrow area or areas. It shall be free from roots, stumps, wood, rubbish, over-size stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased at least 10 percent above the design elevation (including free-board) unless otherwise shown on the plans. All fill materials shall be CL, CH, GC or SC, as approved by Soils Engineer.
- III. Placement
Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8 inch maximum thickness layers (before compaction) which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.
- IV. Core Trench
Where specified, a core trench shall be excavated along or parallel to the centerline of the embankment, as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being 4-feet. The depth shall be at least 4-feet or as shown on the plans. The side slopes of the trench shall be 1:1 or flatter. The backfill material for the core trench shall be compacted either by equipment or rollers to assure maximum density and minimum permeability. Compact to 95% of AASHTO T-99 density. GC, SC, CH, or CL materials only shall be used in the core trench as approved by Soils Engineer.
- V. STRUCTURAL BACKFILL
Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed 4 inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than 4 feet to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a structure or pipe unless there is a compacted fill of 2 feet or greater over the structure or pipe.
- VI. PIPE CONDUITS
A. REINFORCED CONCRETE PIPE
1. Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-301. An approved equivalent is AWWA Specification C-301.
2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3" or as shown on the drawings.
3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be exercised to prevent any deviation from the original line and grade of the pipe.
4. Backfilling shall conform to structural backfill as shown above.
5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
B. For pipes of other materials, specific specifications shall be shown on the drawings.

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development and Research
These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.
Howard Soil Conservation District
These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
U.S.A.-Natural Resources Conservation Service

ENGINEER'S CERTIFICATE

I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with a "as-built" plan of the pond within 30 days of completion.

Signature of Engineer (Print name below signature)
Date
Signature of Developer (Print name below signature)
Date

AS-BUILT CERTIFICATION

I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plan and meets the approved plans and specifications.
Signature
PE No. 1329
Date 11/11/98
Certify means to state or declare a professional opinion based on the on-site inspections and material tests which are conducted during construction. The on-site inspections and material tests are those inspections and tests deemed sufficient and appropriate by commonly accepted engineering standards. Certify does not mean or imply a guarantee by the engineer nor does an engineer's certification relieve any other party from meeting requirements imposed by contract, employment, or other means, including meeting commonly accepted industry practices.

OPERATION AND MAINTENANCE SCHEDULE OF HOME OWNERS ASSOCIATION OWNED AND MAINTAINED STORMWATER MANAGEMENT FACILITY EXTENDED DETENTION POND

- HOME OWNERS ASSOCIATION'S MAINTENANCE RESPONSIBILITIES:
1. Top and side slopes of the embankment shall be mowed a minimum of two (2) times a year, once in June and once in September.
 2. Other side slopes, the bottom of the pond, and maintenance access should be mowed as needed.
 3. Debris and litter next to the outlet structure shall be removed during regular mowing operations and as needed.
 4. When deemed necessary for aesthetic reasons, sediment should be removed from the pond. Approval of the Department of Public Works is required.

VII. CONCRETE

Concrete shall meet minimum requirements set forth in Maryland State Highway Administration Specifications Materials, Highways, Bridges, and Incidental Structures, Article 20.07 (Portland Cement Concrete Mixtures), Mix No. 3.

VIII. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway and borrow areas shall be stabilized by permanent seeding and applying straw mulch in accordance with "Standards and Specifications for Soil Erosion and Sediment Control in Urbanizing Areas" immediately after finish grading.
Fertilizer: 10-10-10 • 11.5 lbs./1000 sq.ft.
Seed: Crownvetch inoculated • 0.5 lbs./1000 sq.ft.
"KY-31" Tall Fescue • 1.0 lbs./1000 sq.ft.
Mulch: Straw • 80 lbs./1000 sq.ft.
Asphalt Tie-down Slopes • 8 gal./1000 sq.ft.
Flat areas • 5 gal./1000 sq.ft.

OPERATION, MAINTENANCE AND INSPECTION

Inspection of the pond(s) shown herein shall be performed at least annually, in accordance with the checklist and requirements contained within USPA 505 Standards and Specifications for Ponds (MD-97B). The pond owner(s) and any heirs, successors, or assigns shall be responsible for the safety of the pond and the continued operation, surveillance, inspection, and maintenance thereof. The pond owner(s) shall promptly notify the Soil Conservation District of any unusual observations that may be indications of distress such as excessive seepage, turbid seepage, sliding or slumping.



S.W.M. DETAILS AND SPECIFICATIONS
JERICHO PROPERTY
TAX MAP No. 29 PARCEL 55
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DATE: June, 1995 SCALE AS SHOWN
SHEET 8 OF 16

FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-2855

OWNER/DEVELOPER

JERICHO, INCORP.
5028 DORSEY HALL DRIVE
SUITE 204
ELLICOTT CITY, MD. 21042

DEVELOPER'S CERTIFICATE

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

SIGNATURE OF DEVELOPER: *[Signature]* DATE: 7/7/95

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER: *[Signature]* DATE: 10/1/95

COLUMBIA VILLAGE OF HARPER'S CHOICE SECTION 5, AREA 3 PHASE II PLAT No. 11248

COLUMBIA VILLAGE OF HARPER'S CHOICE SECTION 5, AREA 3 PHASE II PLAT No. 11248

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FOR CONTINUATION SEE ROAD DRAWING

"FOR SECTION 'A-A' SEE SHEET # 7."

STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM

INLET PROTECTION

FOR CONTINUATION (SEE SHEET 4 AND 5)

NOTE: THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 10.1200 OF THE HOWARD COUNTY CODE. FOREST CONSERVATION NOT NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS. DATE: 11/2/95
 REVIEWED FOR DEPARTMENT OF PUBLIC WORKS. DATE: 11/2/96
 REVIEWED FOR DEPARTMENT OF PLANNING AND ZONING. DATE: 1/20/96

No.	REVISION	DATE
1	ADDED RIP-RAP TO SHALLOW MARSH, DELETED GABION WALL	6-15-99

GRADING AND SEDIMENT CONTROL PLAN
 JERICO PROPERTY

TAX MAP NO. 20
 FIFTH EDITION
 HOWARD COUNTY
 DATE: JUNE 1994

AS-BUILT 11/11/98

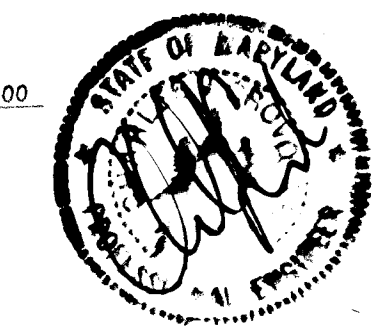
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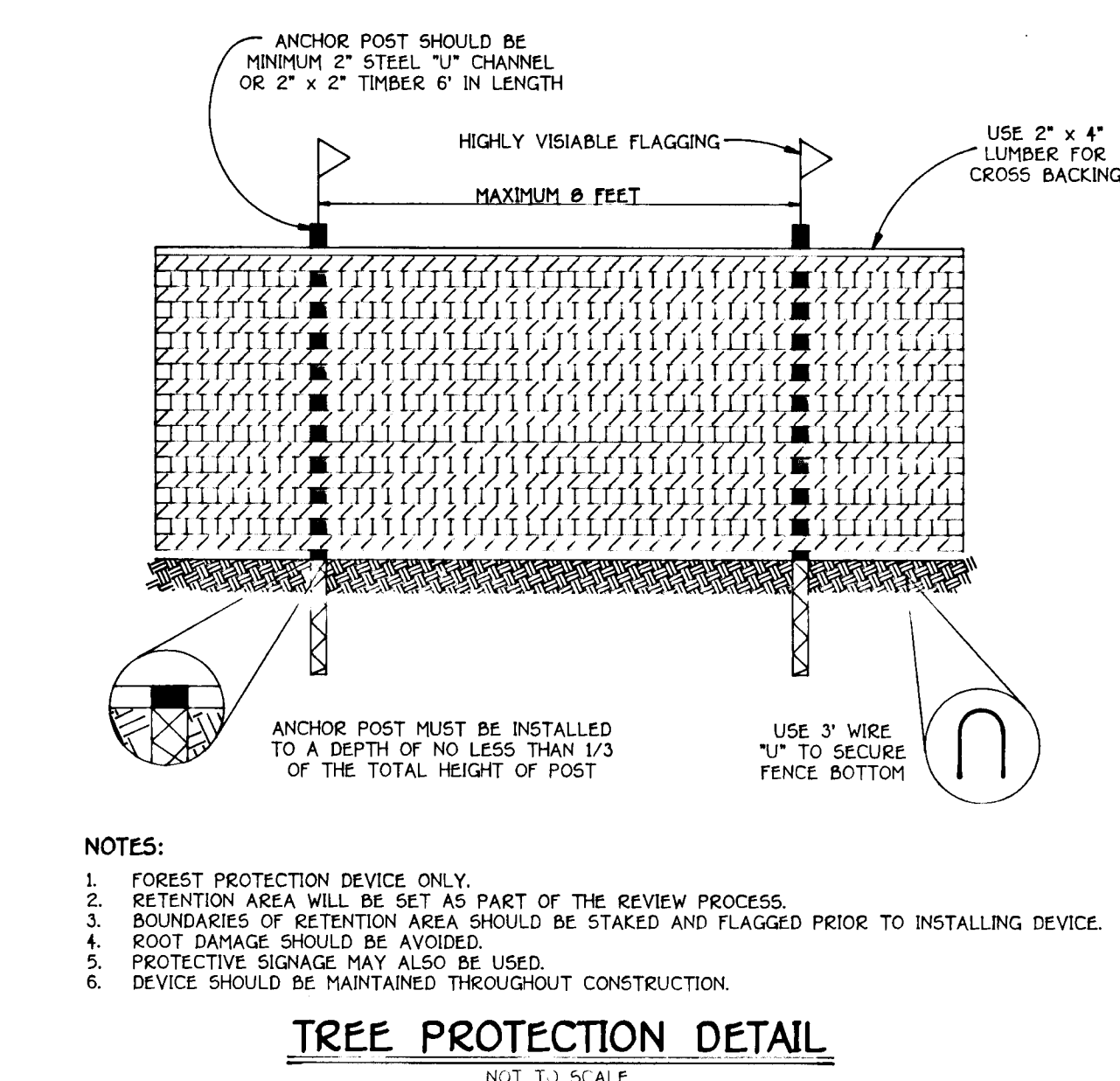
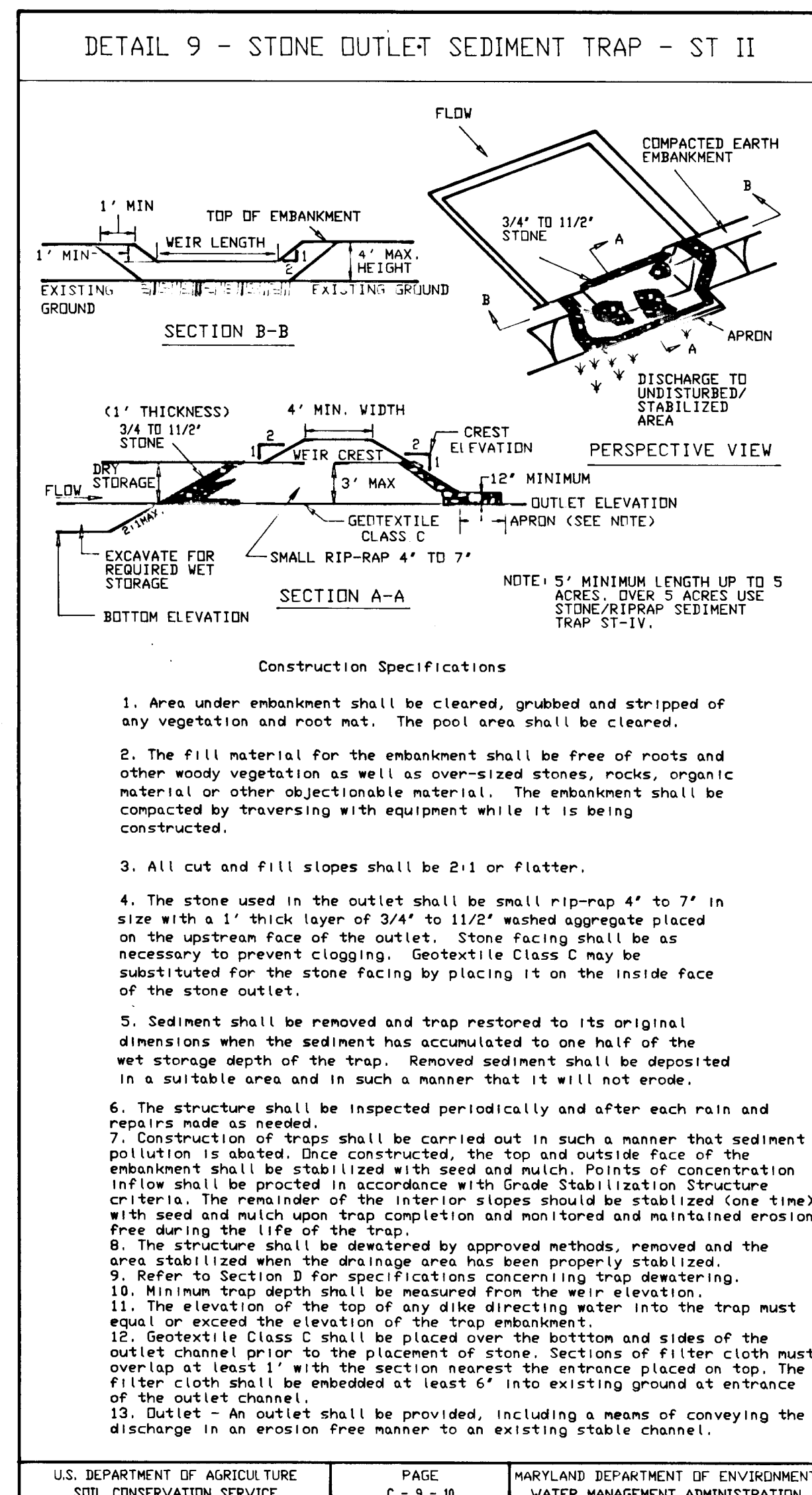
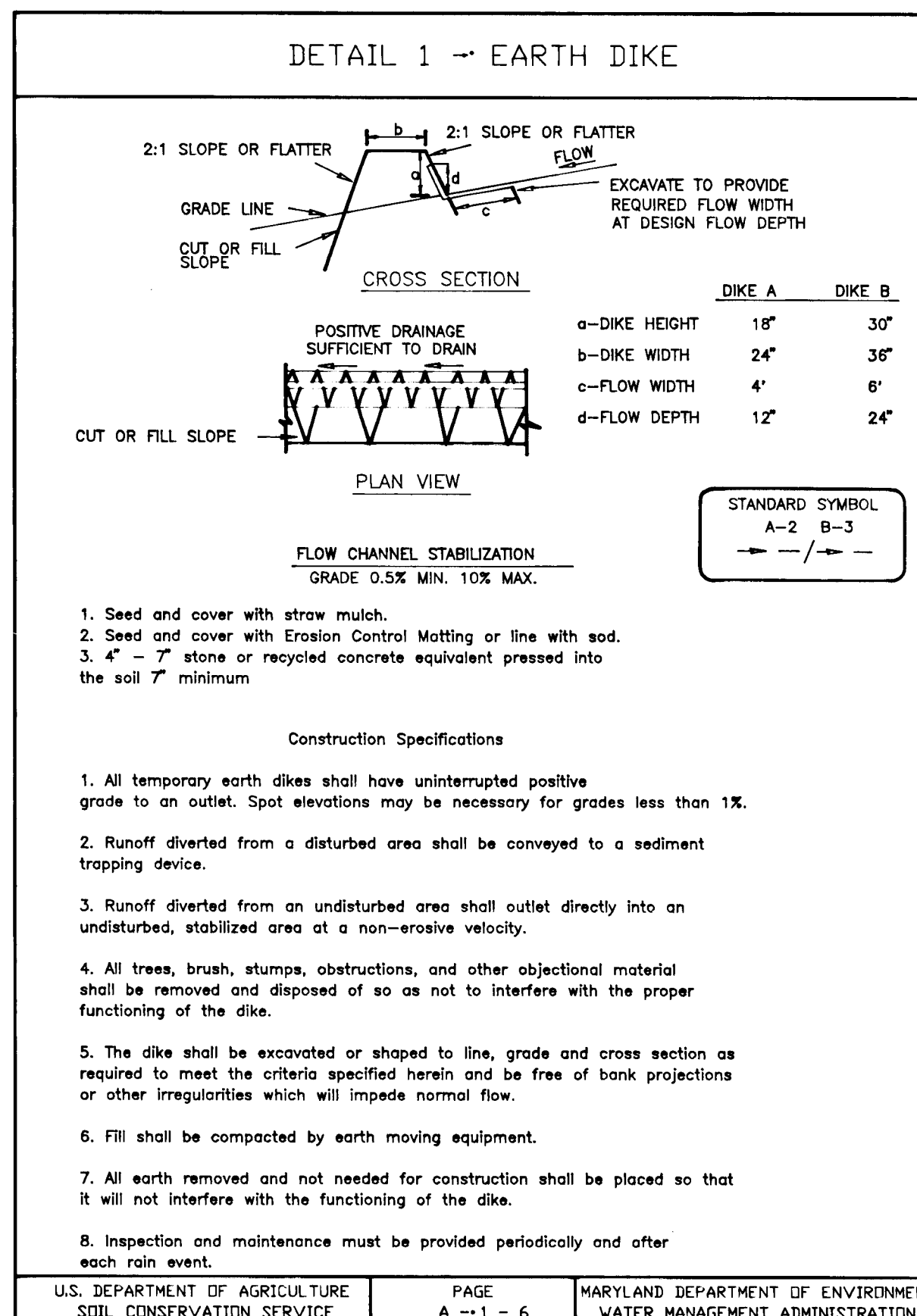
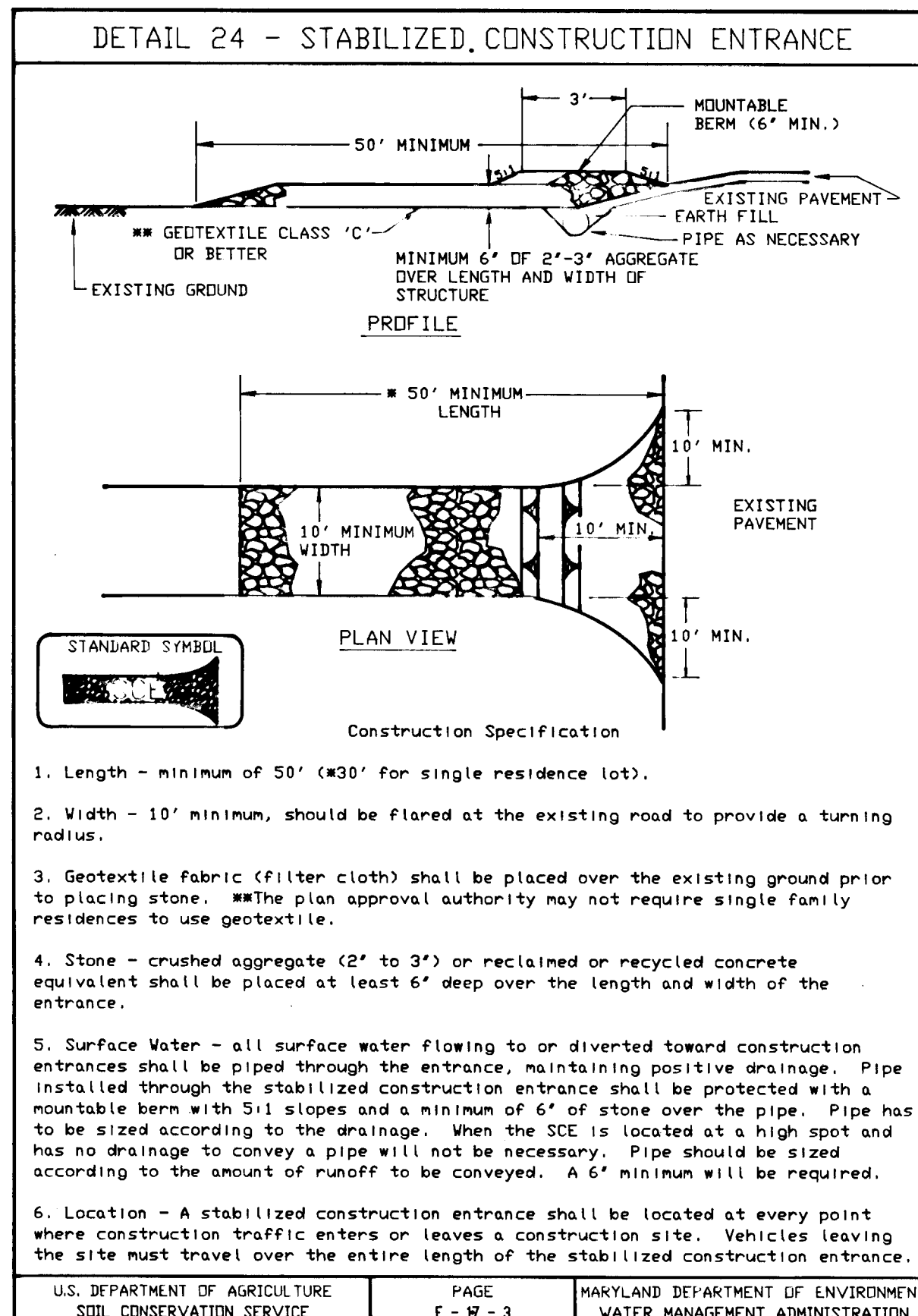
17821

PLAN
 SCALE: 1" = 50'

FISHER, COLLINS & CARTER, INC.

JERICO, INC. 200
 5020 DORSEY HALL DRIVE
 SUITE 204
 ELICOTT CITY, MD. 21042
 (410) 461-2855





SILT FENCE

Silt Fence Design Criteria

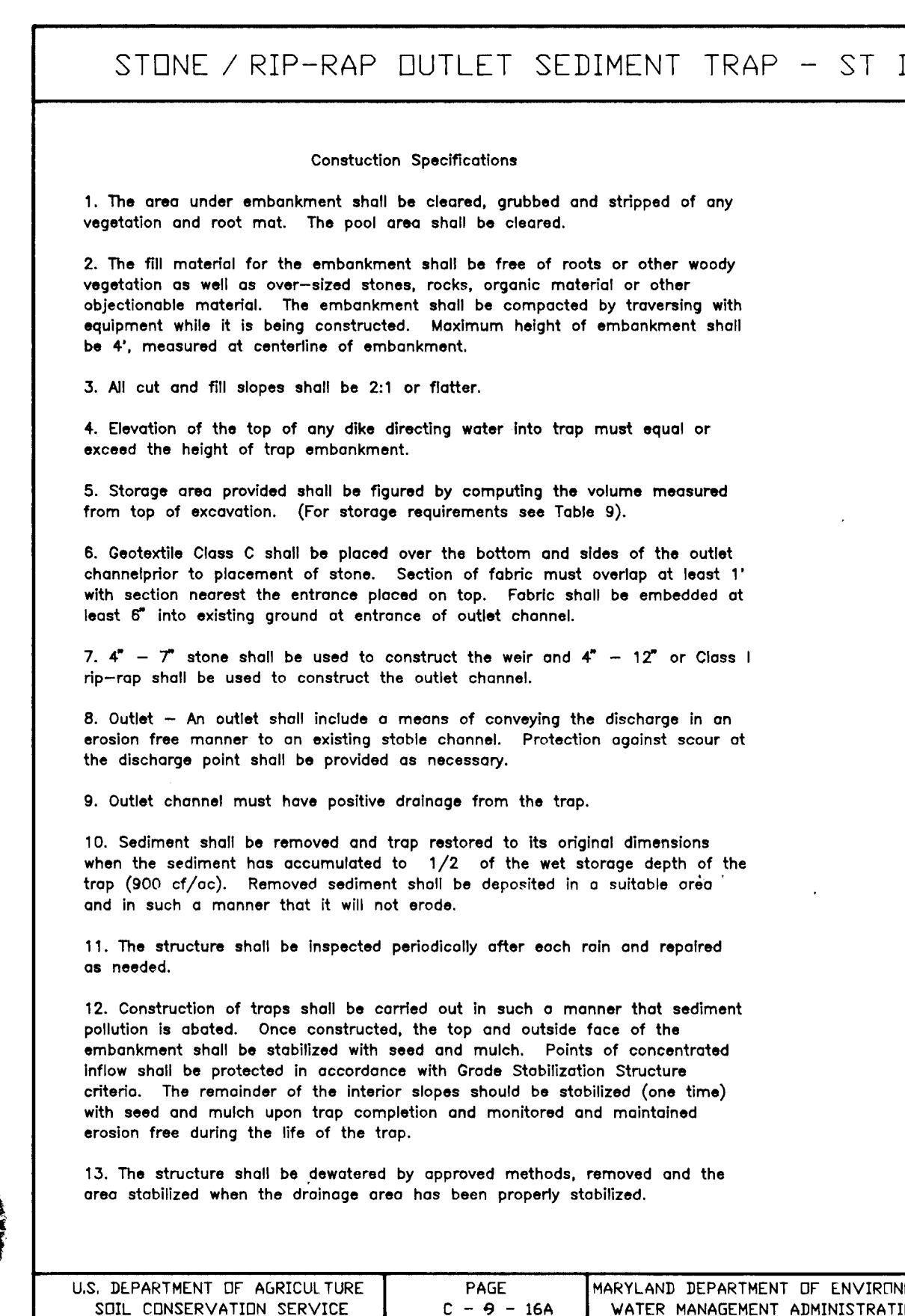
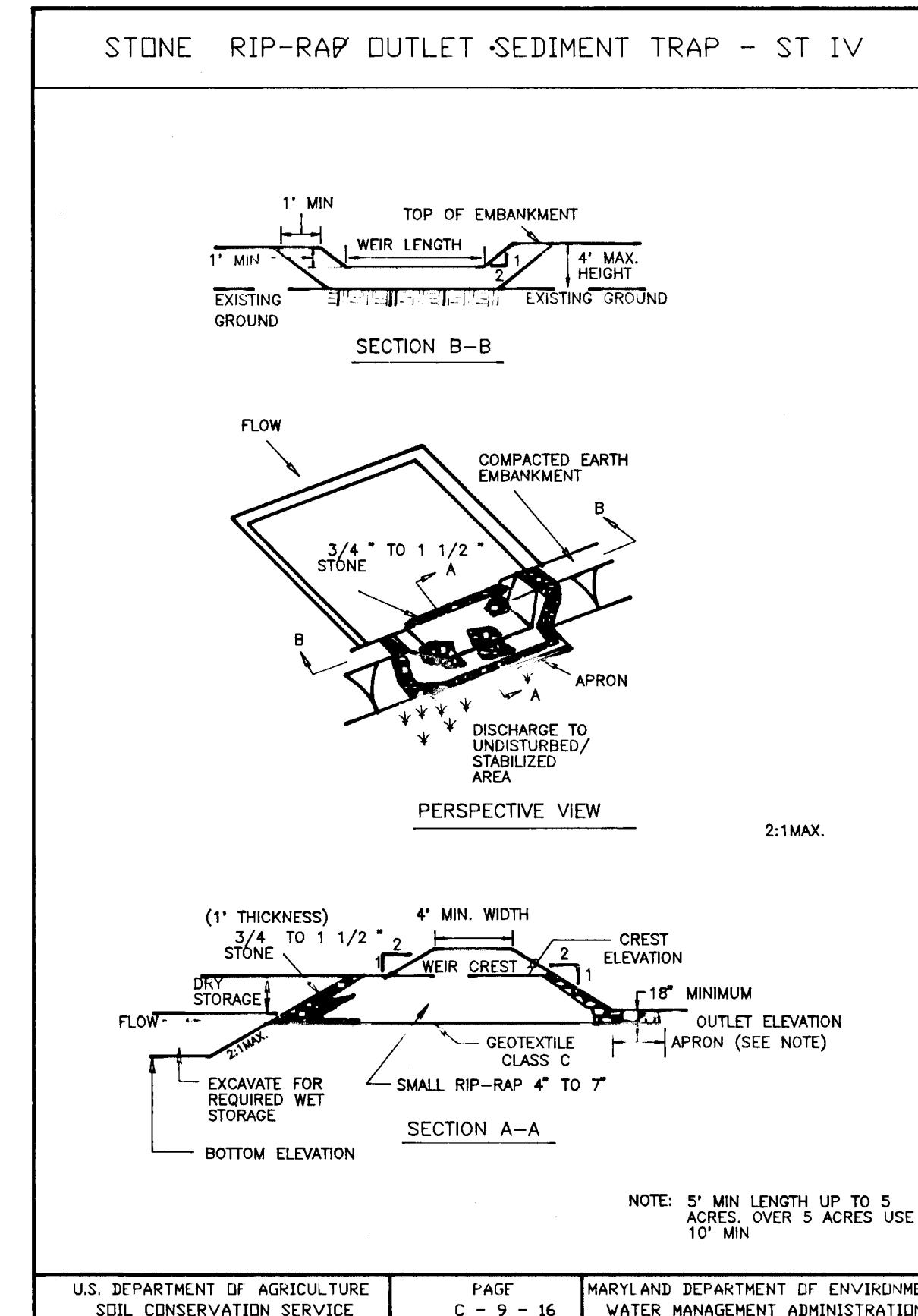
Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

PAGE
E - 15 - 3A

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION



OWNER/DEVELOPER

JERICHO, INCORP.
5026 DORSEY HALL DRIVE
SUITE 204
ELLCOTT CITY, MD. 21042

ENGINEER'S CERTIFICATE

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer (Print name below signature) 7/17/95
Date

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer (Print name below signature) 7/17/95
Date

Approved for HOWARD SOCD and meets Technical Requirements.

Signature of Howard SOCD 1/2/95
Date

Signature of Howard SOCD 1/2/96
Date

APPROVED - DEPARTMENT OF PUBLIC WORKS

Signature of Department of Public Works 1-23-90
Date

APPROVED - DEPARTMENT OF PLANNING AND ZONING

Signature of Department of Planning and Zoning 1/20/96
Date

Signature of Department of Planning and Zoning 1/20/96
Date

SEDIMENT CONTROL NOTES & DETAILS

JERICHO PROPERTY

TAX MAP No. 29 PARCEL 55
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DATE: JUNE, 1995 SCALE AS SHOWN

SHEET 10 OF 16

AS-BUILT 11/11/98 F-96-06

20.0 STANDARDS AND SPECIFICATIONS
FOR
VEGETATIVE STABILIZATION
DEFINITION

Using vegetation as cover for barren soil to protect it from forces that cause erosion.

PURPOSE

Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration (Up to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary soil stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dunes, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.

Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.

Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

A. Site Preparation

1. Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
2. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
3. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.

B. Soil Amendments (Fertilizer and Line Specifications)

1. Soil tests must be performed to determine the exact ratios and application rates for both line and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
2. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Fertilizer may be substituted with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee of the producer.

3. Line materials shall be ground limestone (hydrated or burnt line may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 98-100% will pass through a #20 mesh sieve.
4. Incorporate line and fertilizer into the top 3-5" of soil by disking or other suitable means.

C. Seedbed Preparation

1. Temporary Seeding

- a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
- b. Apply fertilizer and line as prescribed on the plans.
- c. Incorporate line and fertilizer into the top 3-5" of soil by disking or other suitable means.

2. Permanent Seeding

- a. Minimum soil conditions required for permanent vegetative establishment:
 1. Soil pH shall be between 6.0 and 7.0.
 2. Soluble salts shall be less than 500 parts per million (ppm).
 3. The soil shall contain less than 40% clay, but enough fine grained material (>300 silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or serotia lespedeza is to be planted, then a sandy soil (<30% silt plus clay) would be acceptable.
 4. Soil shall contain 1.5% minimum organic matter by weight.
 5. Soil must contain sufficient pore space to permit adequate root penetration.
 6. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
- b. Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
- c. Apply soil amendments as per soil test or as included on the plans.
- d. Mix soil amendments into the top 3-5" of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3" of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.

D. Seed Specifications

1. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.
Note: Seed tags shall be made available to the Inspector to verify type and rate of seed used.
2. Inoculant - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Use fresh inoculant as directed on the container. Do not use inoculant after the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75-80°F. can weaken bacteria and make the inoculant less effective.

E. Methods of Seeding

1. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder.
 - a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen: maximum of 100 lbs. per acre total of soluble nitrogen; P205 (phosphorous): 200 lbs/acre; K2O (potassium): 200 lbs/acre.
 - b. Line - use only ground agricultural limestone. (Up to 3 tons per acre may be applied by hydroseeding). Normally not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated line when hydroseeding.
 - c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.

11. Dry Seeding: This includes use of conventional drop or broadcast spreaders.

- a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.
- b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

111. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

- a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
- b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

F. Mulch Specifications (In order of preference)

1. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonable bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.

11. Wood Cellulose Fiber Mulch (WCFF)

- a. WCFF shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
- b. WCFF must be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
- c. WCFF, including dye, shall contain no germination or growth inhibiting factors.
- d. WCFF materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
- e. WCFF material shall contain no elements or compounds at concentration levels that will be phytol-toxic.
- f. WCFF must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1-6% maximum and water holding capacity of 90% minimum.

Note: Only sterile straw mulch should be used in areas where one species of grass is desired.

G. Mulching Seeded Areas - Mulch shall be applied to all seeded areas immediately after seeding.

1. If grading is completed outside of the seeding season, mulch along shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
2. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
3. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.

H. Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:

1. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour if possible.
2. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
3. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70 Petroseal, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.

IV. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

I. Incremental Stabilization - Cut Slopes

1. All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15'.
2. Construction sequence (Refer to Figure 3 below):
 - a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
 - b. Perform Phase 1 excavation, dress, and stabilize.
 - c. Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as necessary.
 - d. Perform final phase excavation, dress and stabilize. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization.

J. Incremental Stabilization of Embankments - Fill Slopes

1. Embankments shall be constructed in lifts as prescribed on the plans.
2. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15', or when the grading operation ceases as prescribed in the plans.
3. At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to a sediment trapping device.
4. Construction sequence: Refer to Figure 4 (below):
 - a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct slope silt fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
 - b. Place Phase 1 embankment, dress and stabilize.
 - c. Place Phase 2 embankment, dress and stabilize.
 - d. Place final phase embankment, dress and stabilize. Overseed previously seeded areas as necessary.

Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- 3) FOLLOWING INITIAL STILL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 4) ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- 5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), STD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 7) SITE ANALYSIS:

TOTAL AREA OF SITE DISTURBED	21.0 ACRES
AREA DISTURBED	19.9 ACRES
AREA TO BE RELOADED OR PAVED	5.6 ACRES
AREA TO BE VEGETATIVELY STABILIZED	14.4 ACRES
TOTAL CUT	36,500 CU. YDS.
TOTAL FILL	38,500 CU. YDS.

- 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

TRAP SCHEDULE

NO.	TYPE	DRAIN AREA	STORAGE		WEIR LENGTH	OUTFALL LENGTH	STORAGE BELOW	CLEANOUT ELEV.	TOP ELEV.	BOT. ELEV.	CREST ELEV.	WET STORAGE LIMIT
			REQ'D (C.F.)	PROVIDED (C.F.)			OR OUTLET CHANNEL DEPTH III (C.F.)					1800 (C.F.)
1.	II	3.24	11,664	11,700	13'	5'	11,700	391.0'	393.0'	388.0'	392.0'	390.0'
2.	IV	1.50	4,840	27,400	8'	5'	4,840	411.0'	415.0'	410.0'	414.0'	412.0'
3.	II	2.56	9,216	9,300	11'	5'	9,300	399.0'	401.0'	396.0'	400.0'	398.0'
4.	II	3.30	11,880	11,900	13'	5'	11,900	395.0'	399.0'	394.0'	398.0'	396.0'

SEQUENCE OF CONSTRUCTION

1. OBTAIN A GRADING PERMIT
2. NOTIFY "MISS UTILITY" 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT (410) 313-1330, 24 HOURS BEFORE STARTING ANY WORK.
3. INSTALL SEDIMENT CONTROL MEASURES, STABILIZED CONSTRUCTION ENTRANCE, RIPRAP OUTLET SEDIMENT TRAPS, EARTH DIKES, INLET PROTECTION, SILT FENCE AND STABILIZE ALL DISTURBED GROUND PER TEMPORARY SEEDING NOTES. 14 DAYS
4. INSTALL UNDERGROUND UTILITIES. 90 DAYS
5. INSTALL ROAD GRADED AGGREGATE BASE COURSE. 10 DAYS
6. INSTALL CURB AND GUTTER. 10 DAYS
7. INSTALL ROAD BITUMINOUS CONCRETE BASE COURSE. 10 DAYS
8. INSTALL EXTENDED DETENTION POND AND SHALLOW MARSH. 45 DAYS
9. OBTAIN PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO REMOVE SEDIMENT CONTROL MEASURES. 45 DAYS
10. STABILIZE ALL AREAS PER PERMANENT SEEDING NOTES. 1 DAY

OWNER/DEVELOPER

JERICHO, INCORP.
5025 DORSEY HILL DRIVE
SUITE 204
ELLICOTT CITY, MD. 21042

ENGINEER'S CERTIFICATE

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

[Signature]
Signature of Engineer (Print name below signature)

7/17/95

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approval Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

[Signature]
Signature of Developer (Print name below signature)

7/17/95

Reviewed for HOWARD SCD and meets Technical Requirements.

[Signature]
H.O.A.-Natural Resources
Conservation Service

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

[Signature]
Howard SCD

APPROVED: DEPARTMENT OF PUBLIC WORKS

[Signature]
Chief, Bureau of Highways

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature]
Chief, Division of Land Development and Research

Chief, Development Engineering Division

SEDIMENT CONTROL NOTES & DETAILS

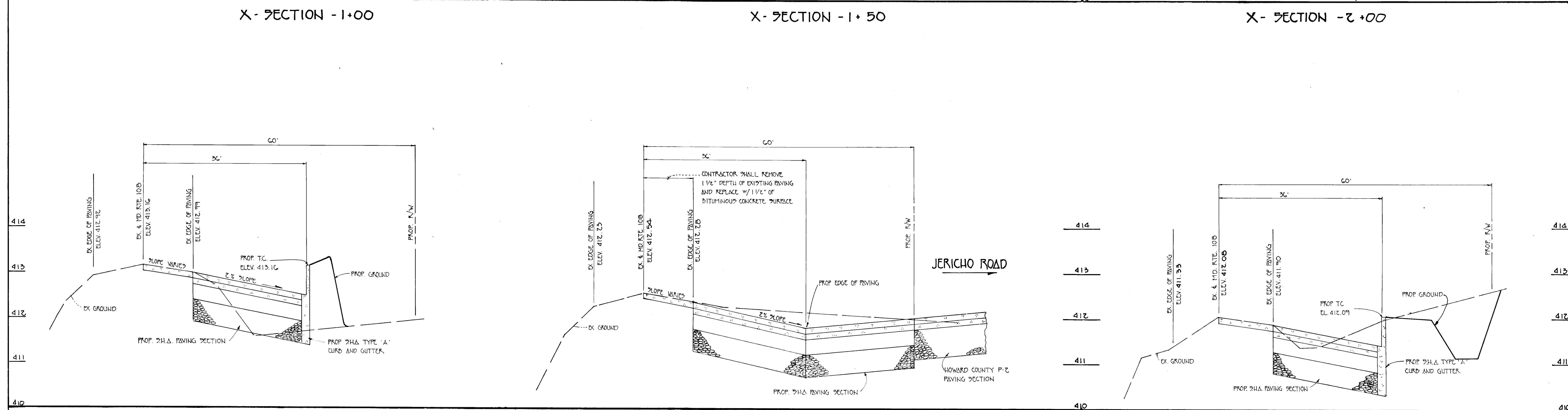
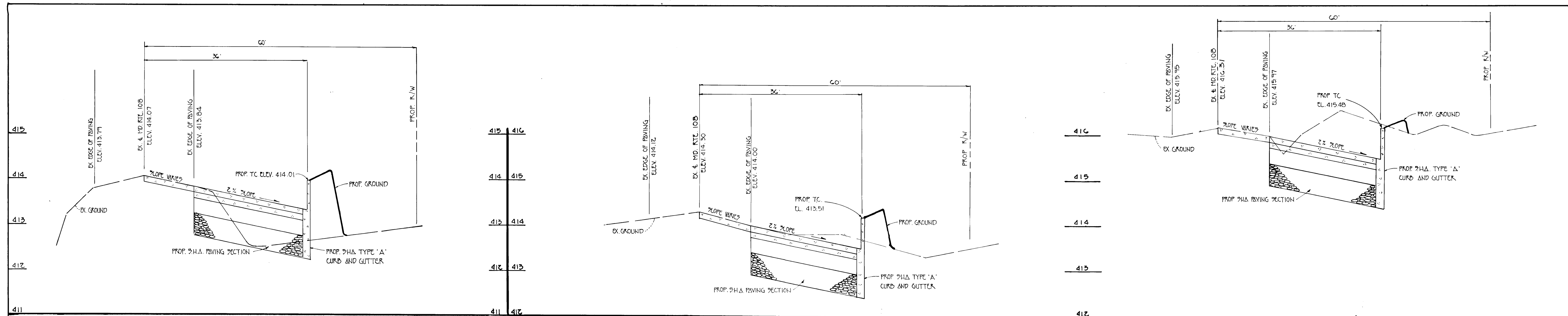
JERICHO PROPERTY

TAX MAP No. 29 PARCEL 55
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DATE: JUNE, 1995 SCALE: AS SHOWN

SHEET 11 OF 16

AS-BUILT 11/11/98

F-96-06



CROSS SECTIONS MARYLAND ROUTE 108

SCALE 1" = 10' HOR.
1" = 1' VERT.

OWNER/DEVELOPER
JERICHO, INCORP.
5026 DORSEY HALL DRIVE
SUITE 204
ELLICOTT CITY, MD. 21042

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10212 BALTIMORE NAT. PIKE.
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

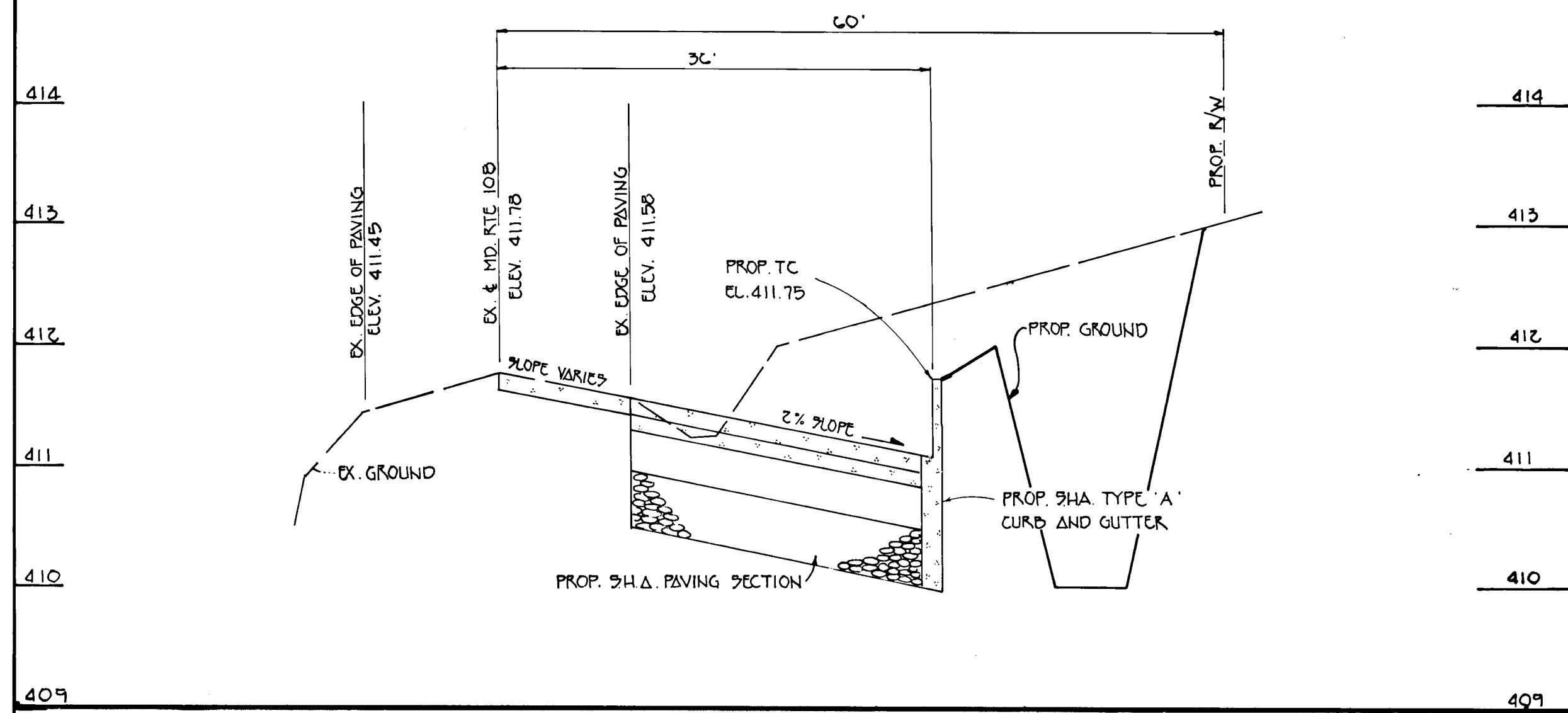
APPROVED: DEPARTMENT OF PUBLIC WORKS
Richard M. Daniels 1-23-96
Chief, Bureau of Highways
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Gina Murray 1/30/96
Chief, Division of Land Development and Research
Chris Dammann 1/20/96
Chief, Development Engineering Division

CROSS SECTIONS FOR CLARKSVILLE
PIKE MARYLAND ROUTE 108
JERICHO PROPERTY
TAX MAP No. 29 PARCEL 55
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DATE: JUNE, 1995 SCALE AS SHOWN
SHEET 14 OF 16

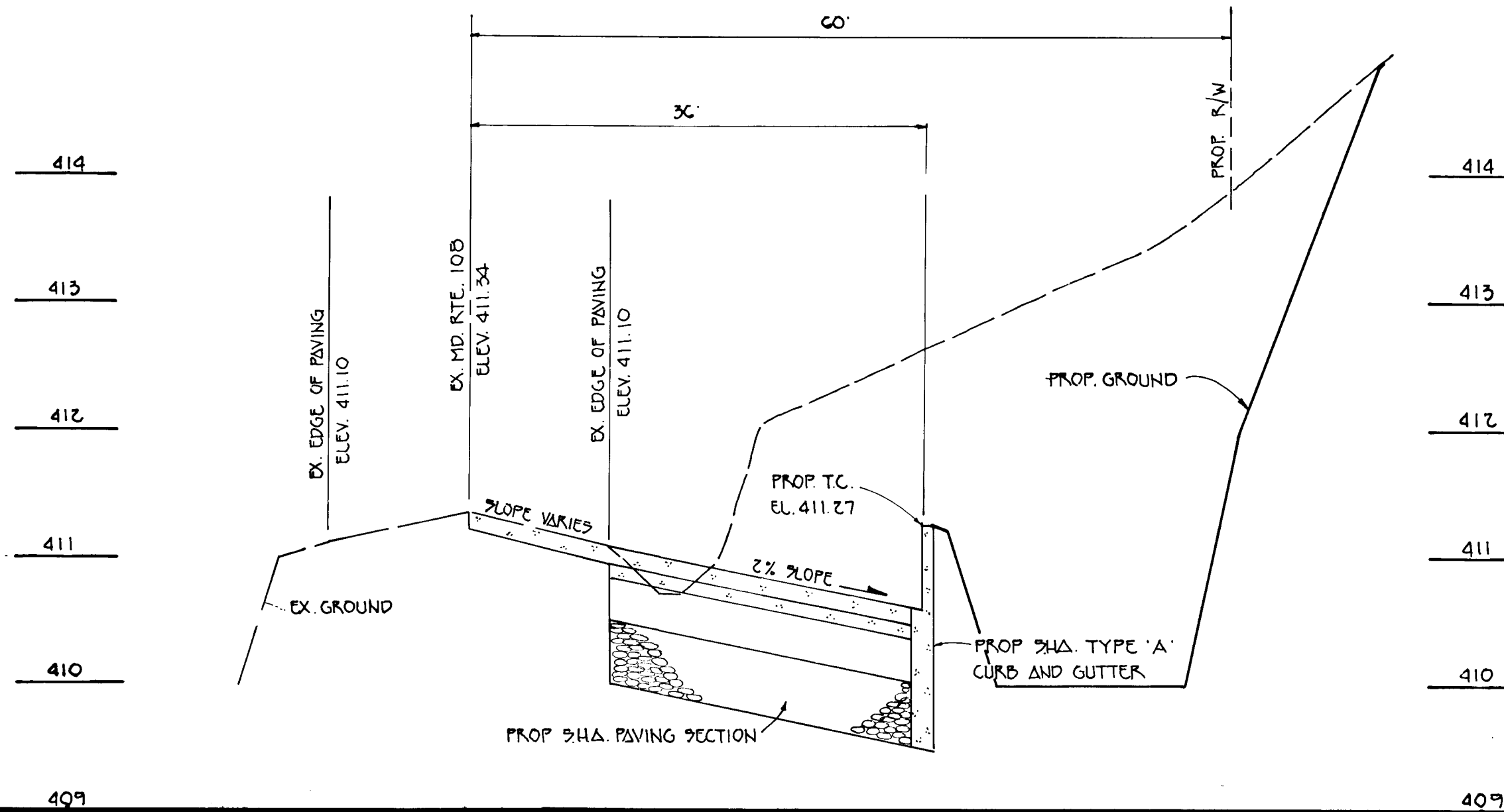
AS-BUILT 11/11/98

F-96-06

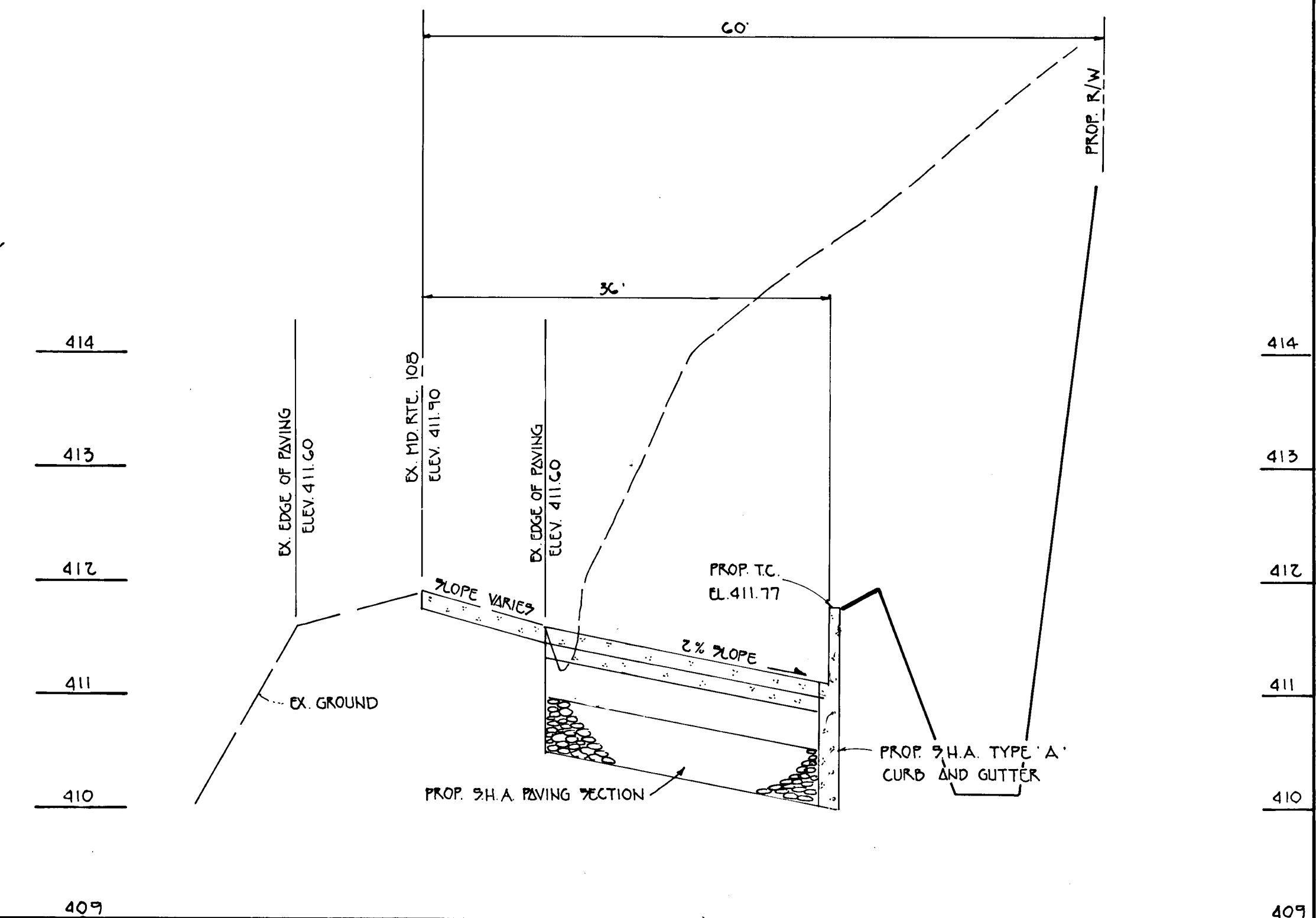
X-SECTION 1+00



X-SECTION 1+50



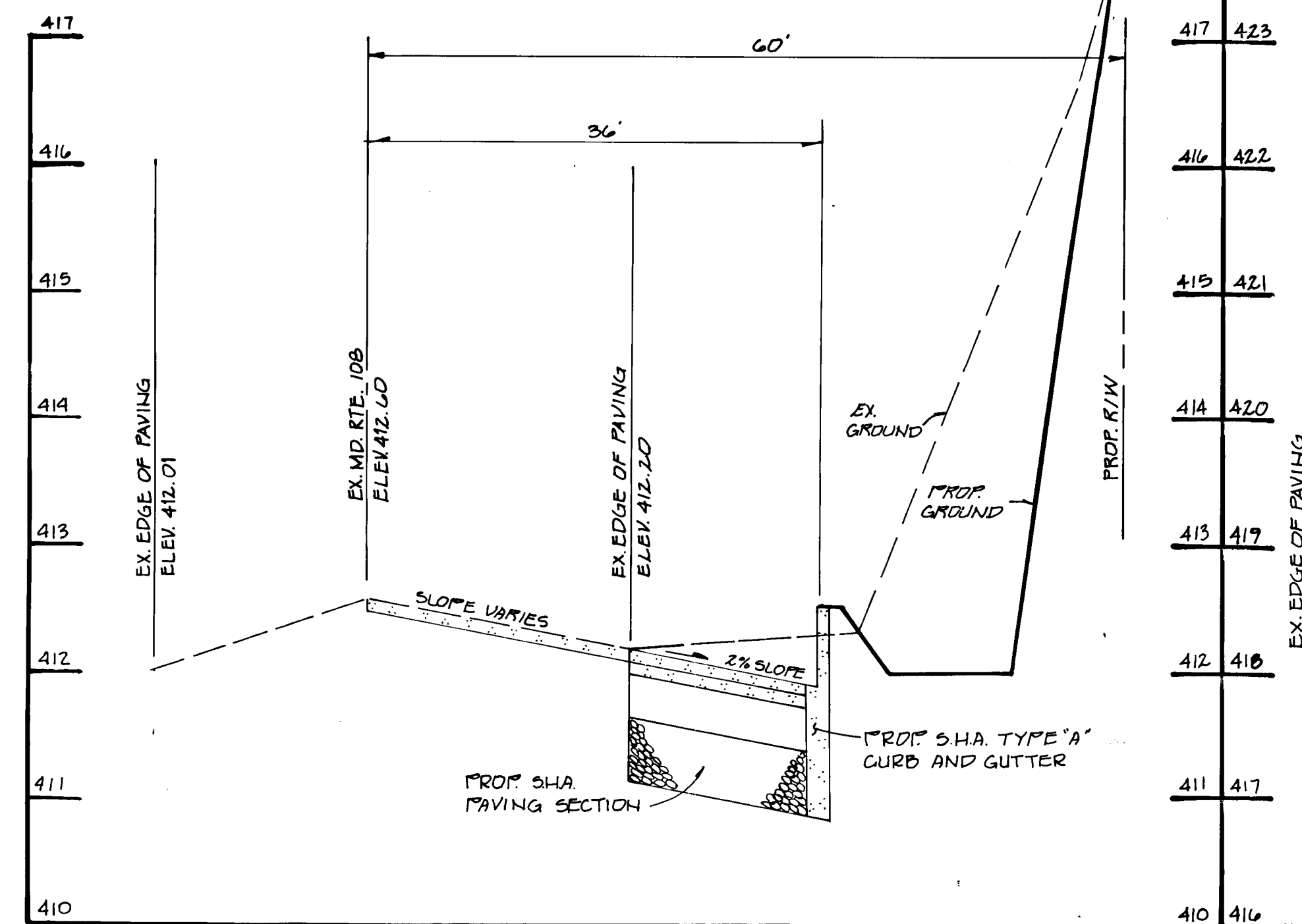
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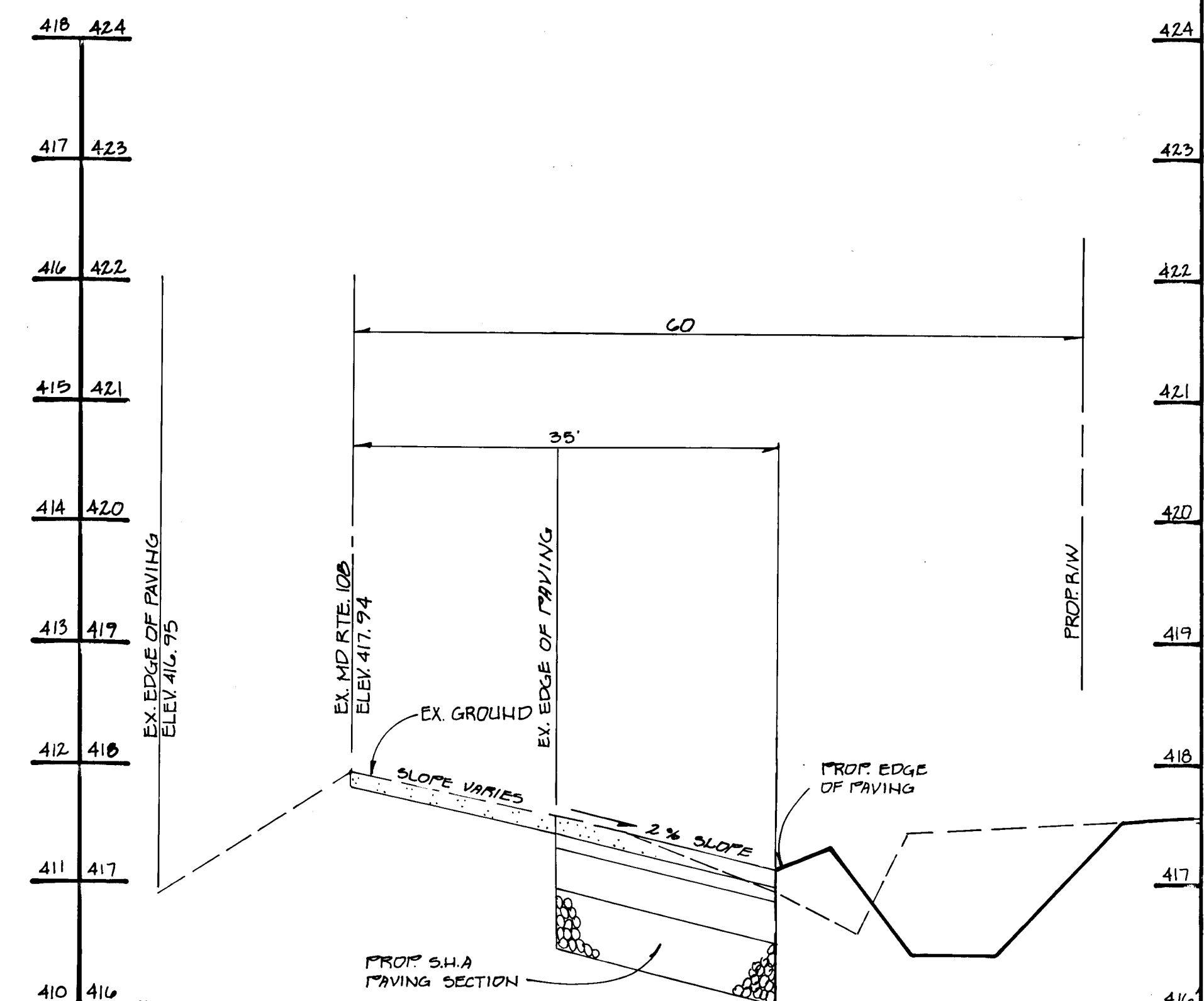
CROSS SECTIONS MARYLAND ROUTE 108

SCALE: 1" = 10' HOR.
1" = 1' VERT.

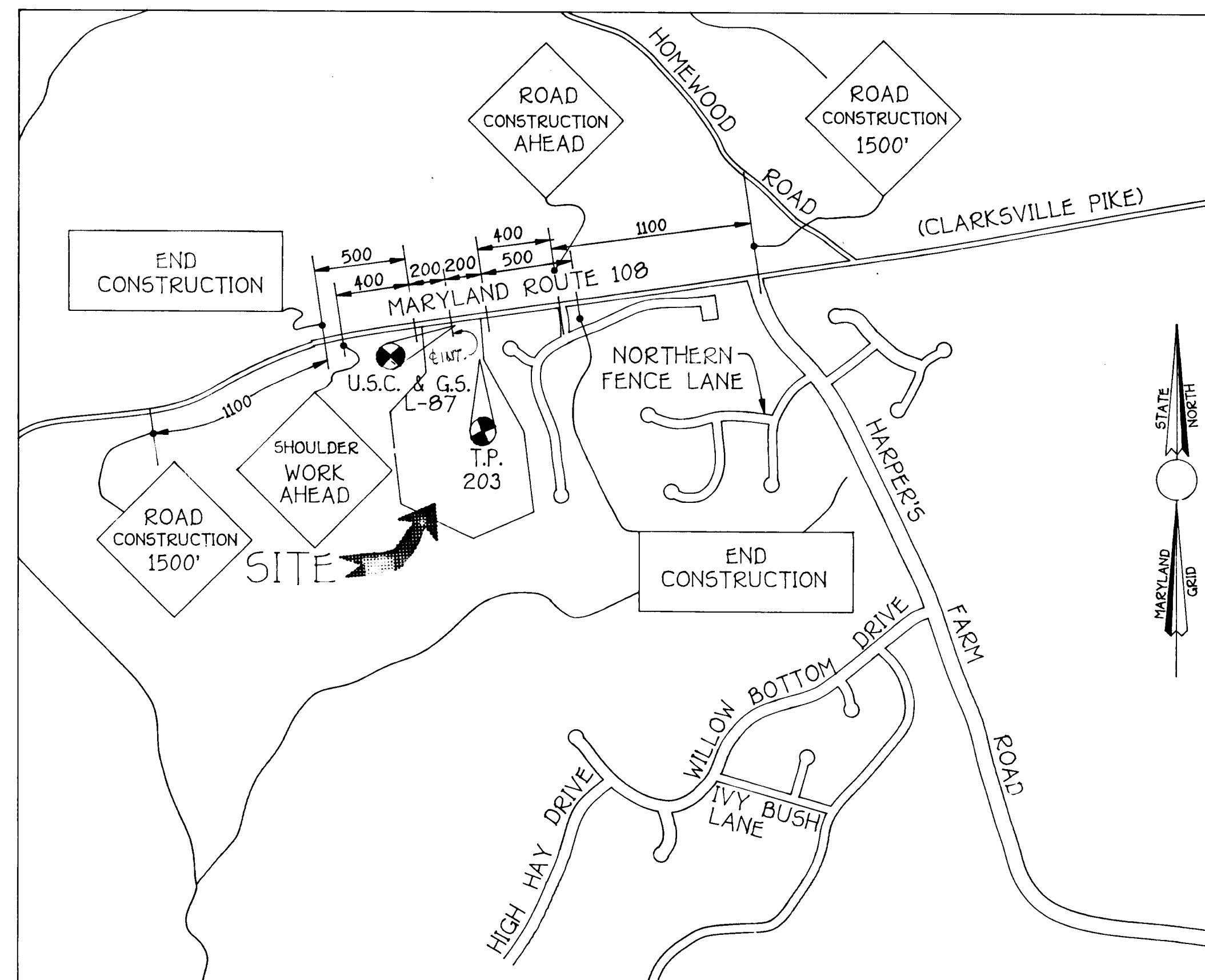
X-SECTION 2+50



X-SECTION -2+50

SEQUENCE OF CONSTRUCTION FOR ROAD
IMPROVEMENTS ALONG MD. RTE. 108

1. TRAFFIC MAINTENANCE ON MARYLAND ROUTE 108: THE CONTRACTOR SHALL INSTALL ALL TRAFFIC CONTROL DEVICES AS SHOWN ON TRAFFIC CONTROL PLAN.
2. THE CONTRACTOR SHALL CONSTRUCT THE WIDENING.
3. THE CONTRACTOR SHALL REPAIR OR PROVIDE ALL NECESSARY STRIPING AS PER STATE HIGHWAY ADMINISTRATION REQUIREMENTS.
4. ONCE THE CONTRACTOR IS TYPING IN THE NEW LANE TO CLARKSVILLE PIKE (MARYLAND ROUTE 108), THE CONTRACTOR SHALL ASSURE ONE LANE TRAFFIC (ONE (1) DAY).
5. TRAVEL LANES SHALL BE A MINIMUM OF TEN FEET IN WIDTH. WHEN ONLY ONE LANE IS OPEN, FLAGMEN AND THE APPROPRIATE SIGNING SHALL BE PROVIDED. THE ROADWAY SHALL BE REOPENED TO TWO LANES AT NIGHT.
6. CONSTRUCTION AND WORKMEN'S VEHICLES SHALL NOT BE PARKED IN A MANNER THAT WILL IMPEDE TRAFFIC OR IMPAIR SIGHT DISTANCE. THESE VEHICLES SHOULD BE PARKED OFF-STREET ON THE CONSTRUCTION SITE OR ON A SIDE STREET NOT UNDER CONSTRUCTION.
7. TRAFFIC CONTROL TO BE IN ACCORDANCE WITH THE M.S.H.A. STD. TRAFFIC CONTROL DETAILS.



VICINITY MAP AND CONTROL PLAN

SCALE: 1" = 600'



OWNER/DEVELOPER

JERICHO, INCORP.
5026 DORSEY HALL DRIVE
SUITE 204
ELLICOTT CITY, MD. 21042FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
1400 40th STREET, SUITE 204
ELLICOTT CITY, MARYLAND 21042

APPROVED: DEPARTMENT OF PUBLIC WORKS

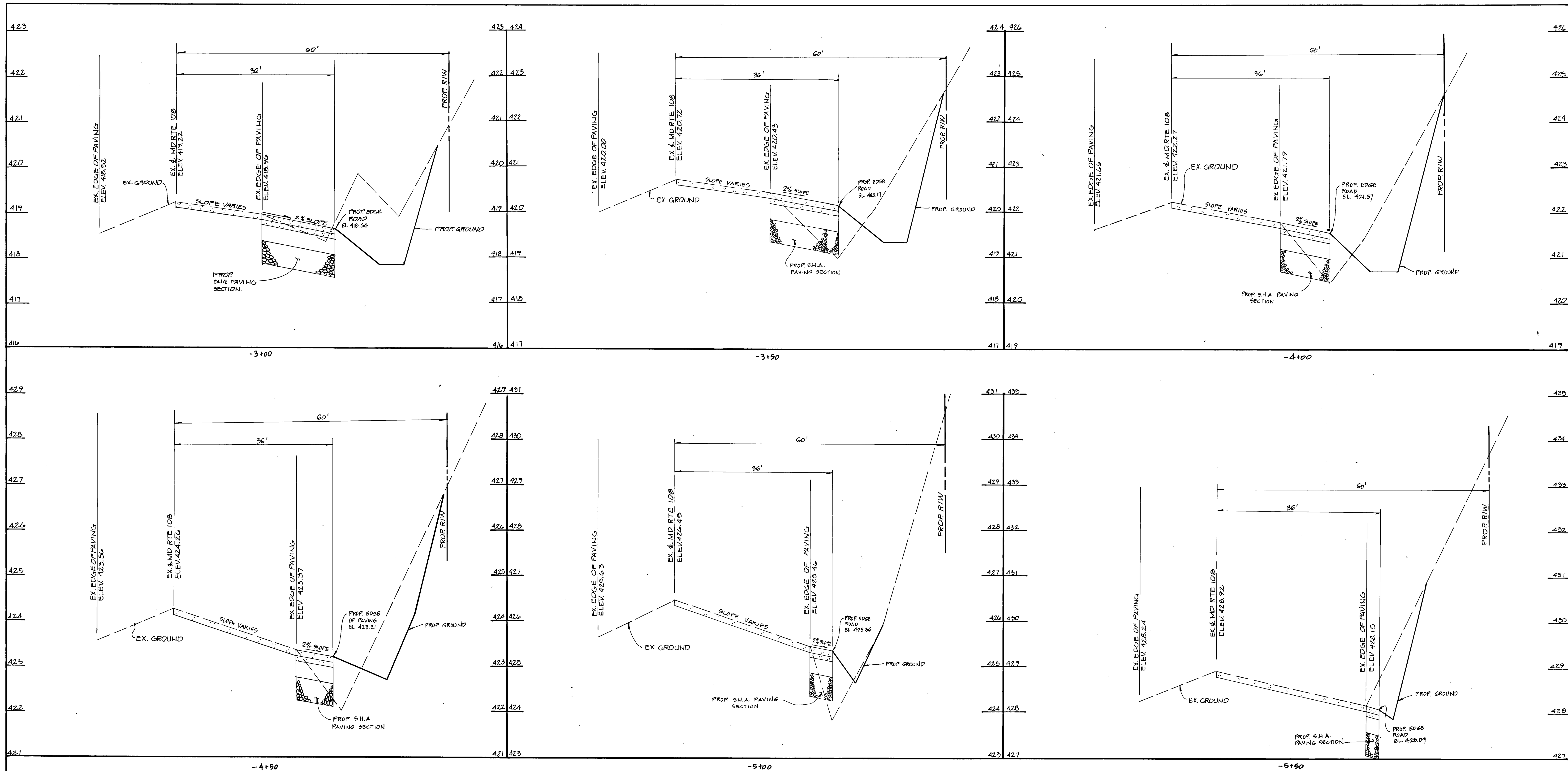
Chief, Bureau of Highways *[Signature]* 1-23-96
Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development *[Signature]* 1/30/96
and Research *[Signature]* DateChief, Development Engineering Division *[Signature]* 1/20/96
DateCROSS SECTIONS FOR CLARKSVILLE
PIKE MARYLAND ROUTE 108
JERICHO PROPERTYTAX MAP No. 29 PARCEL 55
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DATE: JUNE, 1995 SCALE AS SHOWN
SHEET 15 OF 16

AS-BUILT 11/11/98

F-96-06



CROSS SECTIONS MD RT. 108

SCALE: 1"=10' HORIZ.
1"=1' VERT.

OWNER/DEVELOPER

JERICHO, INCORP.
5026 DORSEY HALL DRIVE
SUITE 204
ELLICOTT CITY, MD. 21042



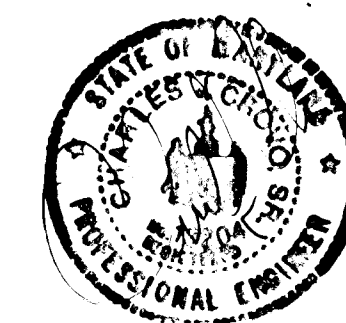
APPROVED: DEPARTMENT OF PUBLIC WORKS

Andrew M. Deneke 1-23-96
Chief, Bureau of Highways Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chris Stumm 1/30/96
Chief, Division of Land Development and Research Date

Chris Stumm 1/20/96
Chief, Development Engineering Division Date



CROSS SECTIONS FOR CLARKSVILLE PIKE & MARYLAND ROUTE 108 JERICHO PROPERTY

TAX MAP No. 29 PARCEL 55
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DATE: JUNE, 1995 SCALE AS SHOWN
SHEET 16 OF 16

AS-BUILT 11/11/98

F-96-06

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
LESTER SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
410.460 - 2895

1780